EVALUATING COMMUNITY PARTICIPATION IN THE EFFECTIVE MANAGEMENT OF PROTECTED AREAS: A CASE STUDY OF LAKE MALAWI NATIONAL PARK

by

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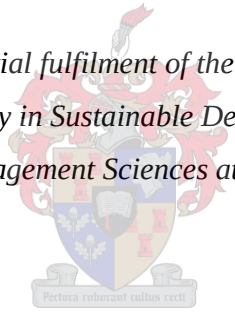

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March 2015

DECLARATION

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ABSTRACT

Lack of collaboration amongst resource user groups in protected areas undermines effective community participation in protected area management. Currently, collaborative approaches are recognised as a planning tool and less of a management tool. However practice reveals that utmost, participatory approaches are recognised in management plans, but fail in the actual implementation. With this study an attempt was made to identify a possible means of enhancing community participation in protected area management by evaluating the extent to which the community of stakeholders in Lake Malawi National Park effectively engage in the management of the protected area. To achieve this aim, the research identified the stakeholders; their relationships with the park; and their relationships with each other. It further evaluated the present level of collaboration on whether it was adequate to enhance community participation in the sustainable management of the park.

This research followed a descriptive-qualitative approach because the researcher was interested in exploring wider perceptions of people. It took the form of a case study to allow for an in-depth understanding of the phenomenon through understanding the participants' point of view in their natural setting. A critical review of related literature and a field research were conducted where data was collected from park documents and seven representatives from three stakeholder groups through the use of semi-structured interviews in English and Chichewa (official and national languages respectively); supported by note taking.

The study has four findings. Firstly, that the primary stakeholders were the park authority management, lodge operators and indigenous people (villagers). Secondly, that stakeholders were found to have a special relationship with the park as it provided business opportunities, a source of livelihood, a sense of empowerment, relaxation space and employment. Thirdly, that stakeholders were not satisfied with the level of relationships in the park especially towards park authority management. This is a deviation from the expected in that for a long time relations in the park were seen to be faulted by the indigenous people and especially towards lodge operators, yet in this research, the relationship between these two stakeholder groups were found to be satisfactory. Fourthly, the research found that whilst there were reduced levels of conflict and that stakeholders related as and when need arose, the general

level of collaboration was below the community's expectation. On a positive note, the findings showed the willingness of the stakeholders to form a representative body which they all felt would be better placed to negotiate decision-making and would improve the level of collaboration and management in the park.

Five recommendations followed on how collaboration and stakeholder skills could be improved in the park and some of which include: the speedy facilitation of the registration of an already existing umbrella association; and the formal recognition of tour guides by Government. These issues if critically looked at, will create an environment in which stakeholders are able to collaborate and work as a community in the management of the protected area which is necessary for conservation and sustainability of livelihoods, the park's objectives.

OPSOMMING

ʼn Gebrek aan samewerking tussen die gebruikersgroepe van hulpbronne in beskermde gebiede ondermyn doeltreffende gemeenskapsdeelname in die bestuur van hierdie areas. Samewerkingsbenaderings word tans gesien as ʼn beplanningsinstrument eerder as ʼn bestuursinstrument. Die praktyk wys egter dat terwyl deelnemende benaderings herken word in bestuursplanne, dit nie geïmplementeer word nie. In hierdie studie is daar gepoog om moontlike maniere te identifiseer om gemeenskapsdeelname te verbeter in die bestuur van beskermde gebiede deur middel van ʼn evaluering van die mate waartoe die gemeenskap van belanghebbendes in die Malawi Meer Nasionale Park doeltreffend betrokke is in die bestuur van dié beskermde gebied. Om dit te bereik, het die navorsing die belanghebbendes geïdentifiseer, sowel as hulle verhouding tot die park en hulle verhouding met mekaar. Verder is die huidige vlak van samewerking geëvalueer om vas te stel of dit voldoende is om gemeenskapsdeelname te verbeter in die volhoubare bestuur van die park.

Die navorsing volg ʼn beskrywende-kwalitatiewe benadering omdat die navorser belanggestel het daarin om die breër persepsies van mense te ondersoek. Dit het die vorm aangeneem van ʼn gevallestudie om sodoende ʼn dieper begrip van die fenomeen te kry deur die deelnemers se oogpunt in hulle natuurlike omgewing te verstaan. ʼn Kritiese oorsig van verwante literatuur en veldwerk is uitgevoer waar data ingesamel is uit parkdokumente en van sewe verteenwoordigers van drie belangegroepe deur die gebruik van semi-gestruktureerde onderhoude in Engels en Chichewa (onderskeidelik amptelike en nasionale tale); asook deur die neem van notas.

Die studie het vier bevindings opgelewer. Eerstens, die primêre belanghebbendes is die bestuursowerheid van die park, verblyfoperateurs en die inheemse bevolking (dorpsbewoners). Tweedens is daar gevind dat rolspelers ʼn spesiale verhouding het met die park aangesien dit die bron was van sakegeleenthede, inkomste, ʼn gevoel van bemagtiging, ontspanning en werk. Derdens, die rolspelers was nie tevrede met die vlak van verhoudings in die park nie, veral ten opsigte van die bestuursowerheid van die park. Dit is ʼn afwyking van wat verwag word in soverre daar vir ʼn lang ruk gedink is dat verhoudings in die park deur die inheemse bevolking bederf is, veral ten opsigte van verblyfoperateurs. In hierdie studie is

daar egter gevind dat verhoudings tussen hierdie twee groepe rolspelers bevredigend is. Vierdens het die navorsing bevind dat hoewel konflik afgeneem het en dat rolspelers met mekaar skakel indien nodig, die algemene vlak van samewerking nie voldoen aan die gemeenskap se verwagtings nie. ’n Positiewe punt is dat die bevindings wys dat die rolspelers gewillig is om ’n verteenwoordigende liggaam te stig wat in ’n beter posisie is om oor besluitneming te onderhandel en wat die vlak van samewerking en bestuur in die park kan verbeter.

Vyf aanbevelings het gevolg oor hoe samewerking en die vaardighede van die belanghebbendes in die park verbeter kan word. Waarvan sommige sluit: die spoedige fasilitering van die registrasie van ’n reeds bestaande oorkoepelende vereniging, en die formele herkenning van toergidse deur die regering. As hierdie kwessies krities beskou word, kan ’n omgewing geskep word waarbinne belanghebbendes kan saamwerk as ’n gemeenskap in die bestuur van die beskermde gebied, en dit is nodig vir die bewaring en volhoubaarheid van lewensonderhoud en die park se doelwitte.

ACKNOWLEDGEMENTS

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My daughter Nina Tayamika-Yahweh…my white rose in the heavenly gardens, you saw me through this Master of Philosophy programme, Mama loves you babe!

I shall forever remain grateful to Yahweh (He who is) for my cup which never runs empty. My prayer is that the same one bless you all abundantly!

TABLE OF CONTENTS

LIST OF ACRONYMS AND ABBREVIATIONS

CPAM	Community Protected Area Management
DNPW	Department of National Parks and Wildlife
EDR	Environmental Dispute Resolution
EMA	Environmental Management Act
FAO	Food and Agriculture organisation
GDP	Gross Domestic Product
GEF	Global Environmental Facility
HDI	Human Development Index
IUCN	The World Conservation Union
LAMANAPA	Lake Malawi National Park Association
LMNP	Lake Malawi National Park
MDGs	Millennium Development Goals
MGDS	Malawi Growth and Development Strategy
MSPs	Multi Stakeholder Processes
NEP	National Environmental Policy
NSSD	National Strategy for Sustainable Development
PA	Protected Area
SADC	Southern African Development Community
SOE	State of Environment Report
UNEP	United Nations Environmental Programme
UNESCO	United Nations Education Scientific and Cultural Organisation
WEHAB	Water, Energy, Health, Agriculture and Biodiversity Principles

LIST OF FIGURES

LIST OF TABLES

CHAPTER 1: BACKGROUND TO EFFECTIVE MANAGEMENT OF PROTECTED AREAS

1.1 INTRODUCTION

This chapter seeks to provide an overview of the research as a requirement of the MPhil in Sustainable Development. It is the researcher's intention to evaluate community participation as it has been argued that it is a critical element in the effective management of natural resources in protected areas (PAs) (Gurung, 1996:33). This will be done through a study that will be conducted amongst Lake Malawi resource user groups also known as stakeholders in Lake Malawi National Park, southern Malawi. Lake Malawi offers a competitive advantage for Malawi across the Southern African Region in terms of tourism due to its bio-diverse properties, and is also a source of livelihood as it does not only provides fresh water for domestic use, but is a source of protein through its fishes which provide about 60 per cent of the animal protein for Malawians especially for those within its vicinity.

1.2 BACKGROUND

It has been argued that the management of protected areas through participatory approaches, like stakeholder involvement leads to the achievement of the common good by benefitting all (Lewis, 1996:11–12). However, for one to be able to analyse the effectiveness of these approaches, user-groups become critical as they usually bear conflicting interests and values which sometimes lead to conflicts over resource use and jeopardise the reason for protecting the area. Therefore if management of a resource is to be effective, the use and user must be the centre of analysis. By analysing user group relations, and their relationship with park authority, this research aims to establish the effectiveness and viability of community participation in Lake

Malawi National Park (LMNP) as a means of improving park management as highlighted in the LMNP management plan.

Interest in this research came as an organisational response (Department of Tourism, where the researcher is an employee) to a series of complaints from lodge operators on the hostility of the indigenous people towards the former and tourists. After deep thought and reading of appropriate literature, the researcher came to the realisation that these conflicts were a possible expression of discontentment with how the park is managed and hence decided to research on examine these relationships.

1.3 PROBLEM STATEMENT

Lack of collaboration amongst resource user groups in protected areas undermines effective community participation in protected area management. Currently, collaborative approaches are recognised as a planning tool and less of a management tool. However practice has revealed that utmost participatory approaches are recognised and included in management plans, but fail in the actual implementation (Malawi (Republic of), 2007:54). This has prompted this study to fill this gap by researching on a practical way of enhancing community participation in protected area management. The area of study is Chembe Village, Lake Malawi National Park, in southern Malawi as it is key for biodiversity conservation, tourism and livelihoods.

1.4 RESEARCH AIM

The research will attempt to evaluate the extent to which the community of stakeholders effectively engage in the management of Lake Malawi National Park. To achieve this aim, the research will attempt to answer the following questions:

1. Who are the local stakeholders?
2. What is the relationship between each stakeholder and the park?
3. How do the stakeholders relate in the park?
4. Is the present level of collaboration adequate to enhance community participation in sustainable management of Lake Malawi National Park?

1.5 RESEARCH METHODS USED IN STUDYING COMMUNITY PARTICIPATION IN LAKE MALAWI NATIONAL PARK

For a research to yield result, it relies on methodology as it is able to control and dictate data acquisition and to extract meaning from them (Leedy, 1997:9). This makes particular sense in qualitative research because its aim is to understand, describe and explain beliefs, behaviours and meaning within the contexts in which they normally occur (Wu & Volker, 2009:2721). This section will describe the design and methodology used in conducting this study. This includes data collection techniques, target population, sampling procedure, analysis and reporting. In terms of ethics and rights of respondents, the researcher received an approval from University of Stellenbosch's Ethics Committee and respondents were asked to fill in consent forms respectively (see Appendices A and B).

1.5.1 Design

Three procedures for evaluation of stakeholder participation have been designed since the 1990's; the use of theory, the use of literature and the use of input derived from agency staff and stakeholders. The researcher adopted and used all three to complement each other, as methodological pluralism is not only popular in evaluation research, but most importantly, overcomes limitations by a single approach (Chase et al., 2004:631). This study followed a descriptive-qualitative approach because the researcher was interested in exploring wider perceptions of people (Silverman, 1997:12). It took the form of a case study to allow for an in-depth understanding of the phenomenon through understanding the participants' point of view whilst in their natural setting. Further, such a process allowed the researcher to gather data from varied participants in an interactive way by being involved personally (Leedy, 1997:157). In addition, using a case study method allowed the researcher to maintain meaningful characteristics of real life events in the field (Yin, 2009:27).

1.5.2 Data collection

The research approach included a critical review of related literature, after which a field research was conducted where data was collected from park documents and representatives of seven respondents from three stakeholder groups. The data was collected with the use of semi-structured interviews (see appendix C) in order to

engage and learn from informal conversations in between the interviews and to observe and understand the phenomenon as it is experienced by participants (Leedy, 1997:158). The interview schedule was both in English and Chichewa (official and national languages respectively), giving respondents' freedom to choose the language they were most familiar with during the interview. This tool was supported by note taking as no respondent was willing to be voice recorded. This further helped the researcher to become aware of gestures of respondents and was hence able to reformulate the question in cases where respondents were not clear (Mugenda & Mugenda, 1999:50). Services of a co-researcher, a Tourism Officer based in Mangochi District and responsible for the area under study were engaged taking advantage of his well-established rapport, and knowledge of the dynamics in the area as it turned out that the Department of National Parks and Wildlife (DPNW) was also a primary stakeholder and could not be part of the research team as this could influence the research results. This helped to eliminate challenges of validity of results. Having a co-researcher turned out helpful as regards the flow of the interview as it turned out no respondent was willing to be voice recorded and hence the researcher had to take notes throughout the interviews.

1.5.3 Target population

The community defined through stakeholder composition in the park was the target group as the park has different resources and different users. Because it was both expensive and time consuming to study the whole target population, 7 respondents were purposely selected from the three different stakeholder groups as identified by the park authorities.

1.5.4 Sampling procedure

A non-probability sampling procedure was used through quota sampling where the researcher purposefully selected subjects to fit the identified quotas in order to include all quotas of the target population (Mugenda & Mugenda, 1999:50). Purposeful sampling otherwise known as criterion-based selection is a strategy that selects persons deliberately in order to gain important information that cannot be gotten from other choice sources (Maxwell, 1996:70). The reason for the selection of this approach is that focus is usually on in-depth information and not making generalisations (Mugenda & Mugenda, 1999:50). This is because it is not only able to

achieve representativeness of the setting and individuals but also captures heterogeneity of the population adequately so as to produce results that are from all subsets of the population; among other reasons (Maxwell, 1996:72).

1.5.5 Analysis and synthesis

Being a qualitative research, data analysis was started during collection through coding into different themes as they emerged and as guided by the research questions (Darlington & Scott, 2002:145; Pope et al., 2000:114). Analysis followed the "framework approach" as the researcher familiarised herself with the data by taking note of recurring themes; which then enabled her to identify a thematic framework in preparation for exploration. Using the framework the researcher then indexed the data using descriptor texts following which she charted the data as a way of re-arranging them thereby providing a distilled summary of each of the most recurring themes. Through mapping she was able to identify the associations between themes in aid of interpretation of the findings. This mapping and interpretation process was highly influenced by the research objectives and emerging themes from the data (Pope et al., 2000:116).

For objectivity, validity, and reliability of results, the researcher avoided compressing the data excessively (Elo & Kyngas, 2008:113) and further triangulated (Yin, 2011:81) it by using observation notes, and the official documents of the park before a final report was prepared. Although there are various ways of analysing data from case studies, among them interpretational, structural and reflective, this study took the form of reflective analysis by using primary intuition and judgement to evaluate phenomenon. This approach made the final report a narrative that is descriptive and in-depth one that attempted to provide a reconstruction of the participants' reality. This will ensure that the reader is drawn into the world of participants closely (Leedy, 1997:158).

The challenge with a case study approach is that the results may not be generalisable due to it being context specific; nevertheless, it will be used to guide development of insight to researchers in the same area as they will be able to use this research as an example (Flyvbjerg, 2001:77). Further, qualitative research does not have a standard

procedure (Darlington & Scott, 2002:142) as it occurs in cyclical phases that usually overlap, making it relatively difficult and lengthy to describe (Leedy, 1997:165).

1.6 RATIONALE FOR THE STUDY

Literature indicates that effective participation in sustainable natural resource management is critical and suggests that although the creation of enabling policy and legal and frameworks is a necessary condition, it is not sufficient. It requires stakeholder collaboration. This is evident in that although there has been a positive transformation in laws and policies, implementation remains a big challenge in most countries. Although an important element, stakeholder collaboration can neither be achieved if the user groups are guided by divergent interests nor by a mere stipulation in the guiding principles. This therefore calls for more research towards the identification of practical ways of improving this collaboration thereby improving the effectiveness of participatory approaches to natural resource management and in particular, protected area management. This research therefore seeks to evaluate stakeholder relations in the sustainable management of natural resources in protected areas as one way of building stakeholder collaboration for PA management.

1.7 CHAPTER OUTLINE

This section provides an overview of following subsections of the thesis from chapter 2 to chapter 5 and is as follows:

Chapter 2: Collaborative approaches in Natural Resources Management

2.1 Introduction

2.2 Some relevant theoretical points of departure

2.3 Theoretical framework

2.4 Summary

Chapter 3: Natural Resource Management in Lake Malawi National Park

3.1 Introduction

3.2 Malawi country profile

3.3 Contextual background of Environmental Governance in Malawi

CHAPTER 2: COLLABORATIVE APPROACHES IN NATURAL RESOURCE MANAGEMENT

2.1 INTRODUCTION

This chapter provides a synthesis of the relevant literature that has been reviewed for the theoretical framework for this research. The aim is to present what other scholars have written about the enhancement of stakeholder participation in natural resources management especially in protected areas and to identify the gaps that this research intends to fill. The literature has been organised by theme and is divided into three main sections which include: an introduction, literature discussion and a conclusion. The literature discussion forms the major part of the chapter and themes used include protected areas and their management, community participation in natural resources management, participatory approaches in protected area management and improving community participation.

For purposes of this study, the analytical concepts of involvement, participation, engagement, collaboration, input, consultation are used interchangeably following the original authors cited. Other key concepts will be defined when appropriate and a theoretical framework to guide the research will also be presented. Finally a conclusion will follow in which a brief summary of the chapter will be provided. This chapter has been sub divided into smaller themes in order to provide the reader with a clear structure of the subject matter.

2.2 SOME RELEVANT THEORETICAL POINTS OF DEPARTURE

2.2.1 Theme one: Protected Areas and their management

2.2.1.1 The concept of Protected Areas

Protected Areas (PAs) are a sanctuary for the conservation and management of biodiversity which is vital for the maintenance of all life forms as they provide ecosystem services (Lewis, 1996:ix). The recent official definition of a protected area was developed by the IUCN in Spain, 2007, and states that a protected area is "a clearly defined geographical space, recognised, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with

associated ecosystem services and cultural values" (Dudley, 2008:8). Such a definition leads to the perception of natural resources as dependent on a range of technological, economic and psychological factors and not necessarily on the physical properties due to the fact that the value that is placed upon them is based on the function they perform rather than the resource as an object (Liu, 2003:464–465). Protected Areas have six management categories organised around primary management objectives based on the "75 per cent rule" as summarised in table 2.1.

Table 2.1: IUCN Protected Area Management Categories

CATEGORY	**DESCRIPTION**
Ia	Strict nature reserve
Ib	Wilderness area
II	National park
III	Natural monument or feature
IV	Habitat/species management area
V	Protected landscape or sea scape
VI	Protected areas with sustainable use of natural resources

(Source: Dudley, 2008)

With the "75 per cent rule," IUCN allows and recommends that protected areas should let at least 25 per cent of its area for other use. For category II which is the focus of this research, the other uses include tourist lodges, villages and fishing, among others (Dudley, 2008:13–23).

2.2.1.2 Historical trends in protected area management

The reason for the establishment of protected areas was to conserve biodiversity and safeguard the continuance of several ecosystem services which are considered vital for the maintenance of the global ecological equilibrium (Thuy et al., 2011:143). Its recorded history in Africa dates back to the 1820's when amidst fears of soil erosion and deforestation, flora was protected. In 1886 game protection followed as it was discovered that biodiversity was at a threat since it was being harvested for food, income and also to pave way for agricultural production. The London Convention in 1900 which was aimed at preserving wild animals, fish and birds in Africa leading to the regulation in hunting and establishment of game reserves was third. However, a

more forceful Convention in 1933, led to the preservation of flora and fauna in their natural state and this gave rise to the formation of national parks and protected areas (Suich et al., 2008:6).

In general, the creation of protected areas has had a number of consequences which include, the rejection of commercial use of wildlife, the centralisation of wildlife and the development of new laws that disenfranchised land holders from the use of wildlife in forms that were sensible thereby undervaluing it (Suich et al., 2008:6), the criminalisation of local hunting for the pot (Hulme & Murphree, 2001:11) and the disruption of socio-ecological systems (Pretty, 2011:128). These factors contributed to the backfiring of fortress conservation as a tool for conserving biodiversity in Africa since, contrary to conservation motivation for America and Europe, conservation is more driven by the rural economy and political constituency (Suich et al., 2008:7).

In southern Africa, the realisation that migratory animals require more space than national parks and the rapid population growth in the 1950's and 1960's that put more pressure on the land outside national parks leading to soil erosion and environmental health concerns (Suich et al., 2008:7), led to alternative approaches to wildlife management shifting the post from wilderness conservation to land use giving rise to the Sustainable Use Approach (Child et al., 2012:5) among other approaches.

In recent times, authors (Child et al., 2012; Hulme & Murphree, 2001; Suich et al., 2008) have argued that the state has failed to manage conservation whilst ensuring that local communities benefit. In particular, Child et al., (2012:2), argue that the state monopolises wildlife through the designation of Protected Areas making it difficult for assessing benefits by stating that the "combination of state monopolies, regulation, administrative pricing, weak institutions and/or predatory governance, and confused or open-access property regimes" distort economic signals thereby making economic analysis nearly impossible leading to what economists call a "market failure". This means that centralisation is not the best option for sustainability because the state fails due to inefficiency. The argument therefore has been to seek alternative approaches to wildlife management on the basis that communities, when given the powers, become more responsible and conserve the resources whilst drawing benefits out of it.

2.2.1.3 Managing protected areas through people centred approaches

Three reasons have been given as to why communities must manage natural resources for conservation. Firstly, is the general belief that in Africa, the resources are located in rural areas. Secondly, that natural resources should be viewed as exploitable and that if well managed they can achieve development and conservation goals concurrently; and thirdly, that market forces should shape incentive structures for conservation (Hulme & Murphree, 2001:1). These reflect the "use it or lose it" principle suggesting that if biodiversity must be conserved it should be exposed so that its very own uniqueness and scarcity should lead to valorisation and conservation (Suich et al., 2008:7).

Community conservation refers "to the ideas, policies, practices and behaviours that seek to give those who live in rural environments greater involvement in managing natural resources that exist in the areas in which they reside, whether permanently or temporarily, and/or greater access to the benefits derived from those resources" (Hulme & Murphree, 2001:4). This is with the realisation that protecting and improving the biodiversity and ecosystem services is critical throughout the world because it affects both the well-being of the people and economic development (Secretariat of the Convention on Biological Diversity, 2008:v).

The application of management has been categorised differently according to author preferences as these categories share related principles by content. The IUCN which is the official institution that deals with protected area management developed four categories-based on the description of who holds responsibility and authority for the protected area-in line with four governance types (Dudley, 2008:26). Other classifications include three major types in terms of policy and practice (Barrow & Murphree, 2001:31); and two broad approaches based on management namely regulatory and participatory management regimes (Thuy et al., 2011:143).

For the IUCN, the first is governance by government where a government ministry is in charge or delegates powers to a non-governmental organisation; second is shared governance which includes joint management, collaborative management and trans-boundary management. Third is private governance by individual owners whether

profit or for non-profit; and fourth is governance by indigenous peoples and local communities where conserved areas and territories are declared and run by local communities (Dudley, 2008:26). Whereas for Barrow and Murphree (2001:31), the first and most common is the *Protected Area Outreach* where the State owns the land and the resource with the objective of conserving biodiversity, ecosystems and species and manages decisions. The second is *Collaborative Management* where the State owns the land with mechanisms that provide for collaboration with the community on management of certain resources under complex ownership and tenure arrangement with the objective of ensuring conservation with the possibility of rural households benefit. And the third is *Community Based Conservation* where although the State might have some control especially in making the final decision, local resource users are allowed to own the land and the resource with the objective of making rural livelihoods sustainable and where land use is central to conservation with an emphasis on the development of a rural economy. Thuy et al.'s categories include state-managed approach and community based approach which is also referred to as Community Protected Area Management (CPAM) (Thuy et al., 2011:143).

However, the community-based approach or governance by the indigenous people can undermine long-term social sustainability as its processes can at times break both operational rules of community-based institutions and boundaries and benefit sharing disputes between stakeholders. It further brings an additional cost to protected area authority operations making it a non-sustainable approach (Thuy et al., 2011:144). To achieve sustainability therefore, a number of factors must be present, and in the context of this research, important is to devolve powers to allow for the involvement of the lowest levels of community participation by scaling up aggregated delegation where the governance dashboard is used as a tool for adaptive management that provides data which is significant as a point of departure in the change management process (Child et al., in press). Such a model requires a combined effort that supports inclusive governance and researchers whose intention is to co-produce knowledge through the combination of experience and science so as to benefit locals and knowledge generation for future users (Pretty, 2011:130).

Further, as a means of improving institutional stability, participatory conservation programmes must include suitable actions to promote social capital among local

people as this leads to improved welfare and better resource conservation. This is because people have varying perceptions of the same environment and this makes them recognise different risks, opportunities and values for the planetary environment and for the management of natural resources (Thuy et al., 2011:143). That is to say that people and organisations (in this case stakeholders) are concerned more with their local natural environment in terms of its status and management. Such a scenario produces complexities, which however if given space, these local actors in their network will recognise the relevant opportunities, risks and values. That is so that these individual groups once organised have the capacity to effectively express their interests and concerns and become actively involved in management (Borrini-Feyerabend et al., 2004:39).

Sustainability will further depend on the extent to which the resource being sustained is embedded into the wider socio-ecological system as the incentives guide regulation formally or informally. This however must be done in recognition that although they are concerned with natural resources, PAs (national parks in particular) operate on certain rules and standards to ensure that they are managed sustainably in order to achieve the common good by benefiting all as the value they provide ranges from economic, cultural, spiritual and medicinal benefits that cannot be easily met by other means (Stolton & Dudley, 2010:6).

This will be further explored in the environmental governance section contained in theme two which argues that one of the key things for ensuring that there is effective management of natural resources, is through the organisation of stakeholders themselves.

2.2.2 Theme two: Community participation in natural resources management

2.2.2.1 The concept of community participation

For purposes of this research, community participation is defined as the involvement of a grouping of people, who are critically placed by their location and activities, in the management and benefit sharing arrangements of natural resources and although not State agents, they can either enhance or degrade the status of natural resources, present or future (Barrow & Murphree, 2001:24). This study uses the concept of

community as an overarching concept that includes primary stakeholders or user groups present in the park for the reason that however different their values are, they are bound together by the presence of the park.

In addition, this research prefers to use community to include all stakeholders to eliminate the thought that community is the indigenous people as found in most literature because this view of community is itself discriminatory as it does not recognise the indigenous groups as full partners in mainstream environmental and developmental initiatives. Indigenous people like any other actor have a role to play as equal partners in the management of resources because of their relationship with the territory and are involved in different but somewhat related aspects of livelihood at the same local level like other actors (Borrini-Feyerabend et al., 2004: 71).

2.2.2.2 An overview of Stakeholder Participation in Natural Resources Management

The involvement of stakeholders in natural resource management is today one of the major challenges that public managers encounter due to the complexity that characterises sustainability issues among them environmental management (Roberts, 2011:151). Literature has indicated the need for a more comprehensive approach in addressing such issues, the most argued of which is *good environmental governance* as an approach that was designed to reduce the complexity by its very nature as it requires the involvement of various stakeholders through a process of meaningful participation thereby fostering multi-level learning (Armitage et al., 2009:96).

The following sub-section will provide an overview of environmental governance by discussing its brief history and challenges as stakeholder participation is the very essence of environmental governance (Muller, 2009:71) meaning that for one to understand stakeholder participation, they must first be able to appreciate environmental governance.

2.2.2.3 Background to environmental governance

Environmental governance has been trending in recent decades due to perpetuity of biodiversity loss and climate change amidst the traditional governance systems prompting a significant shift on coping mechanisms regarding emerging challenges

that it could not address easily (Muller, 2009:68). One of the most notable definitions developed by the South African Department of Environmental Affairs states that environmental governance "refers to the processes of decision-making involved in controlling and managing the environment and natural resources and includes the manner in which decisions are made." In other words, decision-making must be bound by the following principles: accountability, representativity, inclusivity, effectiveness, efficiency, justice and social equity (Department of Environmental Affairs, 2007:54). Good governance entails stakeholders implementing improvements in their quality of life through agreed processes and principles of collaboration; and its criteria includes sustainability, equity and citizen engagement among others (Muller, 2009:71).

A critical review of the literature indicates that environmental governance can be said to have its roots in environmental movements. These movements have been defined in numerous ways due to the complexity of environmental issues, one of which is their description as organisations, interests and people who protect the environment by engaging in collective activities. These authors argue that such movements which form social networks are non- or at times semi-institutionalised, and apart from having a collective identity engage themselves in collective action against those they perceive to be their opponents. One such example is a grouping of western environmentalists called the green movement who in addressing environmental challenges believe in making radical political and social changes (Connelly et al., 2012:95–96).

In most of the African countries environmental movements initially centered on wildlife preservation stemming from colonial laws and although these laws have transformed over time, in most countries they are still followed to a great extent. This for a long time resulted in a violation of indigenous community's land ownership, land tenure and land use rights and was therefore associated with the eviction of African residents from these areas aside being banned from subsistence hunting on what previously was perceived traditional land (Khan, 2002:17). South Africa provides a very good example in the rise of environmental justice. In the assessment of progress made on the transition to environmental governance in South Africa an

indication has been made that there has been tremendous progress in theory as opposed to practice (Khan, 2002:31; Rossouw & Wiseman, 2004:138).

2.2.2.3.1 The challenge of environmental governance

Examples from the South African context, highlight major challenges common in environmental governance which include the lack of coordination and the fragmentation that exists amongst different actors responsible for execution. These challenges breed smaller but equally challenging issues like failure of government agencies to enforce legislation effectively, scarcity of human personnel and the over centralisation of authority that cripples the local system. Also critical is the lack of public participation (Muller, 2009:73). Further, these environmental management problems are characterised with high levels of complexity, which essentially means such a complexity cannot be managed by a single unit (Roberts, 2011:151).

2.2.2.3.2 Addressing environmental governance challenges

In order to address the challenges of environmental governance there is need to improve communication and understanding between resource users and government and also, the ability and openness to learn from experience must be nurtured (Muller, 2009:73) as these promote democratic transformation (Rossouw & Wiseman, 2004:139).

The following sub section will discuss two of the most effective and recommended ways of addressing environmental governance challenges necessary for collaborative approaches in the management of natural resources which include an enabling policy environment and stakeholder collaboration.

2.2.2.3.2.1 Enabling Policy Environment

Literature on environmental governance reviewed in this chapter indicates that policy is key to bringing about desired change in environmental governance. Policy formulation processes at the government level requires an enabling environment, taking into consideration social, economic, political, cultural as well as ecological factors. That is to say that for the development of an effective policy, inputs (resources, demand, support and environment) must be present; and that outputs and outcomes (strategies and documents concerned with implementation and evaluation)

include issues of behaviour change as indicators (Roberts, 2011:147). For Roberts, behaviour change requires three conditions: availability and enforcement of laws, persuasion, and if those required to change are able to see economic advantages of changing their behaviour. These three elements are what make policy instruments (Roberts, 2011:162–163).

In discussing the rise of new policy instruments (which are characterised by the use of non-regulatory instruments designed and implemented by non-State actors) authors argue that pure governance is rare, and that regulation is necessary to bring about environmental justice as indicated that a combination of different instruments including regulation is necessary for a change of behaviour especially in cases where behaviour change is governed by cultural and religious beliefs (Jordan et al., 2005:477; Roberts, 2011:168).

In response to sustainability calls, the current policies must go beyond environmental interests to cover social and economic interests and that citizen participation must be vital; and electoral politics that hamper policy developments specifically designed to protect the survival of future generations as most of the beneficiaries of sustainable development are yet to be born. The challenge of implementing sustainability programmes also lies in the nature of their activists in that decisions are dependent on which side the policy implementer is on. For instance if one is techno-centric, then an incremental approach to change will be advocated for unlike when one is eco-centric whose actions are biased towards radical approaches to change (Roberts, 2011:172–174).

The formulation of policy occurs in global, regional and national contexts. Globally, the State becomes a signatory on existing international treaties and conventions especially on both conservation and use of natural resources some of which have direct impacts on the implementation of environmental issues at national level and include the Global Environmental Facility (GEF) which grants funding for environmental projects deemed to be of significance at the global level, and the Convention on Biological Diversity (Muller, 2009:81), the Food and Agriculture Organization (FAO), and United Nations Environmental Programme (UNEP) among others (Chasek et al., 2010:60–71).

Although there are different actors on the global environmental scene, the State is perceived to be the most important actor, as its duties involve creating, implementing and expanding international environmental regimes. Its role in the expansion of environmental regimes is flexible as these roles are determined by domestic and foreign policies, relative costs and benefits of the particular regime, at the same time gauging the likely political consequences at the international level. These are most likely supported by economic power, scientific and technological capabilities it may have. Other important actors include intergovernmental organisations, non-governmental organisations, multinational corporations and treaty secretariats (Chasek et al., 2010:53–54).

At regional level, such commitments include SADC Protocols, bi-lateral and trilateral Memorandum of Understandings & Treaties; whereas at national level policies and legislations form part and parcel of policy formulation. In particular, at national level, the Constitution of countries governs all government action and is supported by other pieces of legislation including Acts and strategies to promote participatory and cooperative governance (Muller, 2009:80). Important to note is that, although a powerful environmental movement is no guarantee for a States' role, it is however a decisive factor in the way the State will define its interests. This definition of interest is also representative of the belief system of the policy maker (Chasek et al., 2010:55–60).

2.2.2.3.2.2 Stakeholder collaboration

Most organisations involved in the management of natural resources recognise the role of various actors outside of the government spheres in good environmental governance in order to direct the management, exploitation and conservation of the natural resources. They also recognise the role of government through the formulation of enabling strategies, laws and policies (Department of Environmental Affairs, 2007:54).

Cooperative (collaborative) environmental governance is a policy strategy emerging in the realm of environmental management aimed at achieving the devolution of management necessary for resolving environmental challenges (Geoghegan &

Renard, 2002:16; Muller, 2009:83). This is what other authors refer to as stakeholder participation (Berkes, 2009; Borrini-Feyerabend et al., 2004).

Stakeholder participation can be described as a process where organisations, groups and individuals decide to take an active role in decision-making on issues that affect them (Reed, 2008:2418). Reed argues that although the recognition of stakeholder participatory approaches has progressed through a number of stages, their use has only increased in sustainable development in the 1990's and it has been made possible by the recognition of the right to participate. This right to participate in shaping policies and decisions affecting people and groups is recognised as a fundamental right supported by various treaties including Article 25 of the International Covenant on Civil and Political Rights of the United Nations Human Rights Charter. The importance of letting people participate is further stated in Principle 10 of The Rio Declaration of 1992. This right to participate however, must be supported by the right to know, for which the State is responsible through transparency and also offering judicial and administrative proceedings (Beder, 2006:105) as appropriate. To this effect, many governments in the developing world in particular, have specific departments and ministries that deal with environmental issues; they have passed necessary legislation and have since on a more practical level trained their staff; they have developed mechanisms that ensure that the environment is monitored, regulations enforced and compliance adhered to and environmental education availed as a means to address environmental problems.

This improvement has led in particular to the development of approaches for environmental dispute resolution (EDR) as well as public participation (community participation). Such approaches allow the collaboration of public interest groups, citizens, private and government sectors towards solutions that are mutually acceptable in response to environmental issues (Moore, 1998:160). Among these approaches is the co-management approach which has been defined as a knowledge partnership that allows cooperation through trust-building, resolving conflict and networking (Berkes, 2009:1699). Key in understanding the definition of co-management is that it is associated with natural resource management, and is regarded as a partnership (Castro & Nielsen, 2001:230) between the private and public sector. It is important to note that viewing co-management as a network helps one evade the

simplistic view of co-management as the sharing of power between actors. It is believed that increased stakeholder (community) participation enhances the efficiency and sometimes the equity of social systems and resource management of common property (Castro & Nielsen, 2001:231).

Furthermore, because the participation of local residents (community) is a fundamental aspect of management as well as sustainable use of the natural resource, there are two relevant approaches that are seen to have an impact. The first one is where local stakeholders participate in the planning and the implementation of development activities in buffer zones that surround the area and the second is where participation is through the formation of effective and appropriate institutions (Mannigel, 2008:500–501).

2.2.3 Theme three: Participatory approaches in protected area management

Governance has in recent times become the key for the effective conservation of protected areas and achieving sustainable development as protected area managers are increasingly becoming aware of stakeholder involvement as a requirement for good governance and make efforts towards an improved involvement (Dearden et al., 2005:90; Dudley, 2008:28). However, involving and cooperating with stakeholder groups, funding training and enforcement of protected area rules, policies, regulations and mandates are the major challenges in protected area governance as interests of beneficiaries may vary resulting in jeopardising the primary aim of participation. Further, the increasing involvement of local communities and providing adequate educational opportunities for stakeholder groups must be the main strategies for addressing these challenges.

In protected area management, co-management is not a new approach as "the 2003 World Parks Congress endorsed recommendations that identify and acknowledge several governance types for protected areas including co-management and community management commonly known as Community Conservation Areas" (Borrini-Feyerabend et al., 2004:93). The use of this approach in the developed world has been around for a while with the recognition that local people are the real protected area managers and not the authorities. In the global south however, forms of

participatory management of protected areas currently in place have evolved as a last measure mainly due to scarcity of management funds, mending long standing relationships and dealing with high political uncertainty (Borrini-Feyerabend et al., 2004:94–96). In most cases participation has been at an advisory level as if government was afraid to lose control if the plan was successful.

Good governance of a protected area is said to be "a governance system that responds to the principles and values freely chosen by the concerned people and country and enshrined in their Constitution, natural resource law, protected area legislation and policies and or cultural practices and customary law" (Dudley, 2008:28). It has been argued that broad public input, advocacy groups and scientists and professionals in park management have worked together in shaping a conservation system that is strong but which also is valued by visitors and local people alike as it meets their needs although not formally linked to collaborative management structures (Schelhas, 2001:302–303). This therefore means that if effort can be invested in building collaborative structures then protected areas characterised by good governance will be better placed in achieving effective management.

2.2.3.1 Critique of people centred approaches

Criticisms of people centred approaches can be found in the protectionist argument and have been well documented by different authors among the most notable of which are two 1999 publications of John Terborgh and John Oates and have been duly summarised by Wilshusen et al., (2002:20–21) who argue that people-centred approaches in biodiversity conservation have become too broad by featuring two conflicting objectives of sustainable development and species protection. This school of thought brings forward five arguments. Firstly, "protected areas require strict protection," secondly, "biodiversity protection is a moral imperative," thirdly "conservation linked to development does not protect biodiversity," fourthly "harmonious, ecologically friendly local communities are myths" and finally that "emergency situations require extreme measures". Wilshusen et al., however counter argue by noting that these arguments are presented in a linear structure and that their contents camouflage much of the complexities involved especially in the developing world be they social and political and are hence inadequate (Wilshusen et al., 2002:19).

2.2.3.2 Improving stakeholder involvement in protected areas

The effective management of protected areas through participatory approaches can lead to sustainable development as decisions are collectively made from a combination of indigenous knowledge systems and scientific knowledge systems. However, this can only effectively be achieved if sustainable development is viewed more of a pragmatic approach than a values approach because pragmatism allows for an identification of both values and ideologies in order to increase our understanding of behaviour, interactions, factors and relationships in different contexts (Hemmati, 2002).

It has been argued that one way of improving stakeholder involvement is through devolution of powers from the State to local people (Zulu, 2012:210). Devolution is the transfer of benefits and decision-making authority over natural resources to local actors from State actors and its benefits include sharing of revenues, infrastructure development, access to some commercial and subsistence products, diversification of livelihoods, political empowerment among others (Shackleton et al., 2002:1–2).

Secondly, the creation of effective and appropriate institutional arrangements is also seen as a means of increasing participation amongst local stakeholders and that both formal and informal structures must be used to ensure increased participation like in the case of the management of Rio Doce State Park in the Mata Atlantica Region of Brazil where personal relationships between the park officials and the local residents were used to boost participation (Mannigel, 2008:505). This means that relationships are key to improving participation. Other cases include Waza National Park in Northern Province of Cameroon where due to major differences in objectives, a third party, the IUCN, facilitated the creation of a multi stakeholder management structure. This structure has a double mandate to separate consultative role of park management and the full management role of the park and its periphery by other stakeholders (Borrini-Feyerabend et al., 2004:280). And in a different setting of Retezat National Park in Romania, where park management authority are required to present their activites to a consultative council for approval. The consultative council is made of all primary and secondary stakeholders and their mandate is to find collective ways of dealing with challenges and expressing their opinions to the running of the park

(Borrini-Feyerabend et al., 2004:253). All three examples depict the formation of appropriate co-management structures appropriate in their contexts.

Thirdly, social learning is another key to improving participation. Mannigel (2008:509) argues that although participation is influenced by logistical, individual, sociocultural and institutional factors, the process of social learning can increase participation if it is jointly embarked on and socially embedded as it can lead to changes in behaviour. This is what other authors call co-production of knowledge (Mitlin, 2008:340). It contributes to the identification of a common purpose and helps develop collaborative relationships which are the two important elements of co-management (Schusler et al., 2003:312).

Achieving collaboration is necessary in order to have a functional policy strategy. Theoretically, it has been argued that coordination stems from three governing structures that include hierarchy, market and networks. Of the three structures, networks through bargaining especially at lower levels are more likely to solve coordination problems. It is believed that if these networks are left to formulate plans for local management but subject to monitoring at the central level, a better management strategy can appear (Muller, 2009:84).

Although all these ways can improve collaboration, it must be remembered that there is no best way of dealing with protected area governance as it depends on context (Dearden et al., 2005:98–99).

2.2.3.2.1 Multi-Stakeholder Process (MSP) as a solution to Stakeholder Collaboration

Literature on stakeholder collaboration suggests that stakeholder collaboration is vital for sustainable development. A notable author in the field, (Hemmati, 2002) argues that the formation of MSPs is a critical element in providing direction towards sustainability and governance. For him, practical arrangements must support the traditional process of coordination in order to come up with cooperative management that is more active. For an MSP to be designed, all players must acknowledge a problem at hand and must be willing to engage in dialogue; they must have a link to official decision-makers, and all must be able to understand the identified issue

(Hemmati, 2002:3). Although this has been discussed, scholars and practitioners should note that, to date there is no single best way of coming up with a governance model as all contextual factors that are relevant must be taken into consideration (Muller, 2009:74).

2.3 THEORETICAL FRAMEWORK

2.3.1 Background

Recent studies show that the concept 'theoretical framework' has no single agreed upon definition but that it nevertheless allows a researcher to understand the different aspects of her research. It is important to note at the onset that there is no single theoretical framework that provides an all-inclusive explanation of the phenomenon under study (Anfara & Mertz, 2006:xxviii). In qualitative research, research is either done to discover theory (an approach that is also known as grounded theory); to guide methodology and analysis; or to frame and conduct the whole study (Anfara & Mertz, 2006:xx–xxv). Being a case study, this thesis uses a theory as an overarching framework as a case study research design does require the identification of a theoretical perspective at the beginning of the inquiry as it affects research questions, analysis and interpretation of the findings (Maxwell, 1996:36; Yin, 1994:28).

As the study explores a preferred theoretical framework, it is necessary to note that there exists several theoretical frameworks with roots in several disciplines and that the strength of a well-read researcher lies in her alertness to other disciplines as use of those frameworks allows her to see new phenomena from what otherwise would have been familiar (Anfara & Mertz, 2006:xxvii). With this background this study will employ a Complexity and Systems Thinking Theoretical Framework in order to evaluate community participation in protected areas since these areas are a composition of various stakeholders whose actions individually affect the whole protected area. Further, the research will employ two additional theories that describe participation, equity and empowerment in order to practically assess the current levels of involvement of stakeholders in the park.

2.3.2 Complexity theory and systems thinking

Complexity can be understood as the study of non-linear interactions. It is a postmodernist theory which was originally developed from the fields of natural sciences (Levy, 2000:67). It developed as a reaction to the modern scientific perspective of reducing a system into its component parts in order to understand the system, which proved difficult as the interactions became more complex as it offered a simplistic understanding of the world (Morin, 1992, p. 383). The theory has since been applied in social sciences to make sense of the world as a complex system (Swilling, 2002:12) that acknowledges the world we live in, as a set of interlocking relationships which have the power to alter situations at any time giving us a head start in understanding the deep rooted nature of problems that characterise the complex world we live in without fragmenting them (Morin, 1992:381).

Theories of complexity on a more practical level, reject the key assumptions of neo classical economists who advocate for, among other things, the existence of a single rational agent acting on behalf of a system as argued by Cilliers (2000:26) in his description of the principle of self-organisation where the need for a system to re-organise is determined not by a decision made by a component but by the history and context of the whole.

A key component of this theory is modelling. Unlike in other theories, modelling in complexity is not to be correct, precise and to be able to predict solutions, but rather to focus on the richness of the interactions. This is because a model fails to capture all available information in the real world leaving us with the responsibility of decision-making to supplement it. Decision-making in an organisation is not a given, it is an emergent factor that rises out of the failure of theory to describe the operations of a system. Decision-making is a choice and this is what ethics entails. Every good manager should be aware that this is real and that it is inseparable from the system (Cilliers, 2000:27–30). Ethics helps us to apply rules according to context which means breaking them where necessary in order to make a responsible judgement (Cilliers, 1998:139).

2.3.3 Application of Complexity theory

The theory has eight general principles in its understanding of organisations (Cilliers, 2000:25–26). This study however will only apply four that are closely linked to the research as these principles are generic meaning that in specific cases others may take superiority in relevance (Cilliers, 2000:24–26). These four have been described below and will appear in the interpretational stage of the data; and of the four characteristics, emergence will be discussed at the same stage.

1. Interaction: Relationships form a fundamental part of complex organisations as the nature of the organisation is determined by the interaction that occurs amongst its members as phenomena happen not in isolation but during interaction.
2. Context: The context and history of an organisation together with the relationships determine the nature of the organisation. Although this history is for the organisation, it is contained in the individual interactions however little, that are constantly taking place and are distributed in the system. That is to say that although two organisations may look similar, if they have different histories, are not the same.
3. Emergence: Because members are always interacting, unpredictable and new characteristics are bound to emerge and although they are undesirable they do not necessarily define a system malfunction. They however are capable of being beneficial and should therefore not be supressed on grounds that they were not planned for.
4. Self-organisation: organisations like complex systems self-organise during shocks. This means that a system is capable at any point to respond to external events without a limit in terms of magnitude and that it can be extremely sensitive to events that threaten its survival. This need to self-organise is dependent on the history and context rather than a decision made by a particular component of the system.

It has been argued that if the challenges of natural resource depletion which in effect causes environmental balances go unchecked, they might cause damage to human societies to the extent of threatening the survival of the human species. Although these challenges exist, they are not because of absolute shortages (that arise due to the high demand as population grows) but rather patterns of interactions and usage which

signal poor management. This means that "the sustainability of the human species can only be defined, ultimately, at the level of the interaction between the entire complex of human systems and all directly implicated environmental systems" (Clayton & Radcliffe, 1996:5–6). Since complexity is a not only the phenomenal lather of reality but the principles that explain the inadequacy of explanation, it allows for the understanding of the unity and diversity of complexity through elements. Thus complexity theory and systems thinking is a new rationality that provides order on the basis of organisation and not the traditional way of organising through order (Morin, 1992:383).

2.3.4 Strengths and weaknesses of the theory

The strengths of the theory are that it puts emphasis on applied action that is also specific and creates room for progress in the short term at minimal cost. It also has the capacity to reduce unnecessary creation of large bureaucracies (Clayton & Radcliffe, 1996:7).

As the approach is non-abstract, underlying similarities are overlooked often, presenting its major weakness and although this encourages improvised responses to immediate pressure, it may mask the failure to recognise and address the primary causes leading to perpetuity of the problem (Clayton & Radcliffe, 1996:8). The theory is also less helpful if one wishes to make a specific position in order to predict outcomes accurately as for one to do so requires a model that compresses the phenomena as there is no practical way of doing so in the real world where phenomena is complex (Cilliers, 2000:27).

2.3.5 Supporting theories on participation

The two supporting theories used in this thesis are those developed by Mannigel (2008) and Borrini-Feyerabend et al. (2004). Mannigel (2008:499) developed a theoretical framework to characterise different participation levels engaged in the management of protected areas. The framework looks at participation from two perspectives; thus *firstly*, participation as a means of improving efficiency of management interventions, which result in changes that are approved by a many people and are sustainable. *Secondly*, the theory views participation as an end as it

drives equity and empowerment of suppressed groups of people thereby facilitating social change.

This theory investigates the different levels of participation and finds that both institutional and social factors become increasingly important as local stakeholders become actively involved (Mannigel, 2008:509), and further correlates with that developed by Borrini-Feyerabend et al. (2004:57–58) whose framework is based on a detailed definition of equity. By using entitlements as a guiding tool for the management of natural resources, the theory states that equity requires that social actors are given the freedom of expression in whichever way seen fit by the social actors.

Both of these theories have been described during application in the analysis chapter.

2.4 SUMMARY

The literature reviewed on protected area management and stakeholder involvement states that collaborative approaches are necessary for the sustainable management of natural resources in protected areas. Further, it recognises that such approaches cannot come into existence by themselves but that an enabling policy environment must be put in place that encourages participation by various stakeholders including the State because of their different capabilities but also that collaboration or a strong network amongst stakeholders is necessary. This is because when organised, stakeholders have the capacity to effectively express their concerns thereby becoming active participants in management of natural resources. Although there is adequate literature on the subject matter, what is missing is the exact way or solution as to how such collaboration can be formed, and this could be explained in that such cases are very complex and therefore context specific. This literature therefore forms a framework through which the research will rest on as it will be applied to a specific context of Lake Malawi National Park.

The argument presented in this study has been that scholars in this field agree and realise that for humanity to effectively conserve biodiversity, communities who derive their livelihood out of these natural resources must participate. The concept community here has been used to refer to a grouping of primary stakeholders and

have been defined spatially as well as by benefit derived from this space. Further, it has also been acknowledged that over time, management approaches including those of protected areas like national parks, have evolved to include the participation principle, a concept that is supported by appropriate legislation both at the local and international levels.

However, there has been a realisation that despite developing appropriate legislation, implementation still is a challenge leading to the failure of the stakeholders to work together effectively in order to participate in the management of natural resources. This is because governance remains the Achilles heel of adaptive co-management which by no means is a panacea. Four South African case studies (Riemvasmaak, Machubeni, Nqabara and Mkhuze) reviewed by Cundill and Fabricius (2010) revealed that factors like historical conflict (in Riemvasmaak); uncertainity regarding future funding, and the effects that social responsibility projects by Government have on community's capacity to adapt and self-organise (in all cases), should not be over looked by facilitators and implementers of co-management. Governance challenges observed are mostly from developing countries because unlike in developed countries they are characterised by low level capacity at various scales where cross scale linkages (institutional) constitute the primary challenge when attempting to initiate transitions needed for co-management (Cundill and Fabricius, 2010:15).

With the reviewed literature there is a gap as to how this implementation can be achieved with a few authors proposing the creation of multi stakeholder processes as a necessary solution to building stakeholder relations. The challenge however remains that given the level of complexity of the sustainability challenges, its application is context specific as the authors note that there is no single solution and that most programmes fail because they are unable to be context specific. This research realises this as a gap requiring more action based studies to be able to apply and change lives in the real world and this is why the researcher will be conducting her study using the case study methodology.

In terms of the theoretical framework presented in this chapter, the researcher choses to employ a complexity and systems thinking theoretical framework as an overarching framework considering that sustainability issues are always cross cutting and complex

requiring a theoretical framework that cuts across disciplines and attempts to looks at phenomenon in totality.

In the next chapter, the policy and institutional context discussed herein will be discussed in application to the Lake Malawi National Park case study.

CHAPTER 3 – NATURAL RESOURCE MANAGEMENT IN LAKE MALAWI NATIONAL PARK

3.1 INTRODUCTION

This chapter introduces the case study in order to put into context the research. It has four sections that include an introduction, background to the case, governance in the park and a summary. The introduction comprises of a Malawi country profile including a brief on Lake Malawi. The second section includes a background to the case, including the uniqueness of the case, park management and Chembe village the study location. The third section discusses the state of governance in the park and includes sections on policy and legal frameworks and its application before getting to the summary of the chapter.

3.2 MALAWI COUNTRY PROFILE

Located between latitudes 9°S and 17°S, and longitudes 33°E and 36°E, Malawi is a landlocked country in Sub Saharan Africa bordered by Zambia in the West, Tanzania in the North, Mozambique in the East and South. It is approximately 118,484 square kilometres of which 24,208 square kilometres consists of water, mostly Lake Malawi, which is 475 kilometres long (Chipofya et al., 2012:145; National Statistics Office & ICF Macro, 2011:1). It has 28 districts spread across 3 regions that are distributed as follows: 6 in the North, 9 in the Centre and 13 in the South. Each of the 28 districts is subdivided into Traditional Authorities (T/As) which are a collection of villages. A village which forms the smallest administrative unit is presided over by a headman/woman (National Statistics Office & ICF Macro, 2011:1).

Malawi is said to be a highly populated country with one of the highest densities in Africa (Novelli & Scarth, 2007:49) pegged at 139 per km² in 2008, with a total population of 13,077,160, which is growing at a 2.8 per cent rate, and is projected to reach 26 million by the year 2030 (National Statistics Office & ICF Macro, 2011:2). Economically, it is categorised as a low income country by the Word Bank and its GDP is estimated to be US$3.5 billion, translating into an income per capita of US$250. At least 40 per cent of the population is regarded as poor (Yaron et al.,

2011:1) and ranks 170 out of 186 on the Human Development Index (HDI) of 2012 (UNDP, 2013:146). Agriculture is the main stay of the economy, as it contributes 90 per cent of all export earnings and employs about 60 per cent of the total population. Although maize is extensively grown as a subsistence crop, tobacco dominates commercial production contributing about three-quarters of the export earnings (Douglas & White, 2003:48).

Apart from agriculture, natural resources like fisheries, wildlife and forests play a significant role in the support of the local and national economy representing 12 per cent of GDP, though they are grossly underestimated due to lack of comprehensive data among other factors, as these resources are mostly a livelihood for local communities (Yaron et al., 2011:ii). It is estimated that 85 per cent of the population lives in the rural areas with a high dependence on direct harvest of natural resources for survival hence putting pressure on the country's natural environment (Novelli & Scarth, 2007:49). This, and poor management practices could explain as to why the country pays highly for unsustainable use of natural resources as noted by Yaron et al., (2011:ii). This cost equals a minimum of 5.3 per cent of annual GDP representing a total of MK 26.6 billion (US$ 191 million). In context, this would cover the deficit in the GDP as the aim is to achieve an annual growth rate of at least 6 per cent as indicated in the Malawi Growth and Development Strategy II (2011-2016) (Malawi Government, 2012:7).

Malawi has a tropical continental climate. Its temperatures and rainfall vary dependent on altitude as well as proximity to the lake. It has three seasons: Hot and Dry (September-November), Wet (November-April), and Cool and Dry (May-August). The average temperatures in July, the coldest month, generally range from 12.5°C-15°C in high plateau areas and 22.5°C to 25°C in the flat areas; whereas the lakeshore usually registers temperatures of 35°C. The wettest month is March and the highest rainfall usually in the high plateaus is higher than 2,050 mm and the lowest mean annual rainfall for low lying areas is 820 mm and below. This is due to the great topographic diversity, which results in a mean of 1,850 mm in areas on the windward side and that between 820 mm-1030 mm for those on the leeward side (Chipofya et al., 2012:146). Figure 3.1 presents a political map of Malawi.

Figure 3.1: Political map of Malawi

(Source: (Nations Online Project, n.d.)

3.3 CONTEXTUAL BACKGROUND OF ENVIRONMENTAL GOVERNANCE IN MALAWI

This section provides a background to the laws and policies that provide the muscle for the joint management of natural resources amongst stakeholders. It must be noted that the current environmental laws and policies were effected during the colonial era but were first revised in 1995 upon the attainment of democracy in 1994.

3.3.1 Legislation, policy and strategy review

As noted in this chapter, the government realises that in order to address environmental challenges reshaping the mechanisms of natural resource governance is vital. Further, it realises that the country depends on the natural resource base if it is to develop although poverty remains a major inhibitor of conservation, protection and use of natural resources since most of the natural resource base is located in rural areas where people's survival depends on the resource. In this regard, it adheres to various principles that guide sustainable resource use both at the international and national levels.

Internationally, Malawi adheres to the 1972 Stockholm Declaration principles, the 1992 Rio Declaration, and the 2002 WEHAB Principles. It is also a signatory to environmental conventions including the Convention on Biological Diversity; and regional protocols, including SADC Protocols (Ministry of Natural Resources and Environmental Affairs, 2004:1).

At the national level, government designed a NEP that seeks not protect the environment and ensure that benefits derived from the use of the environment are maximised for both the current and future generations (SDNP, 1998). This policy is backed by both the EMA of 2000 and the supreme law of the land, the Constitution of 1998. The republican Constitution under section 13 (d) states in its principle of national policy that the welfare of the people shall be improved by effecting policies and legislation so as not only to prevent environmental degradation, but to provide a living and working environment that is healthy for both current and future Malawians. This is to be done by recognising the rights of future generations and conserving biological diversity. It further states in section 13 (e) that policies shall be designed and implemented to achieve the improvement of rural communities whilst being aware of rural standards of living (Malawi Government, 1998).

Government departments in Malawi are guided by the MGDS II (2012) which is in line with the NEP and the EMA to ensure that development follows a sustainable path.

The EMA which was developed in 1996, recognises the challenges that existed in the previous laws and that the design of the laws were in such a way that encouraged environmental challenges brought as they were an adoption of colonial laws at independence. This revised legislation therefore realises the need to synchronise environmental concerns with social and economic development plans of the country with an aim of incorporating sustainable use and creating ways for management approaches that allow for joint management of natural resources (Environmental Affairs Department, 2010).

The 1998 SOE for Malawi also encourages the cooperation amongst State and non-State actors and emphasises that when it comes to the management of natural resources, local community participation promote direct public investment and results in social equity in as far as natural resource management is concerned (SDNP, 1998).

To ensure that this is done, the EMA provides a reporting structure from the smallest administrative unit to the executive level. The challenge however is that in practice the structure is far from being followed. This together with the fact that the reporting structure is a one way process and not interactive makes it difficult for such a robust network to be followed, and this could partly explain as to why the structure although in the laws is practically invalid.

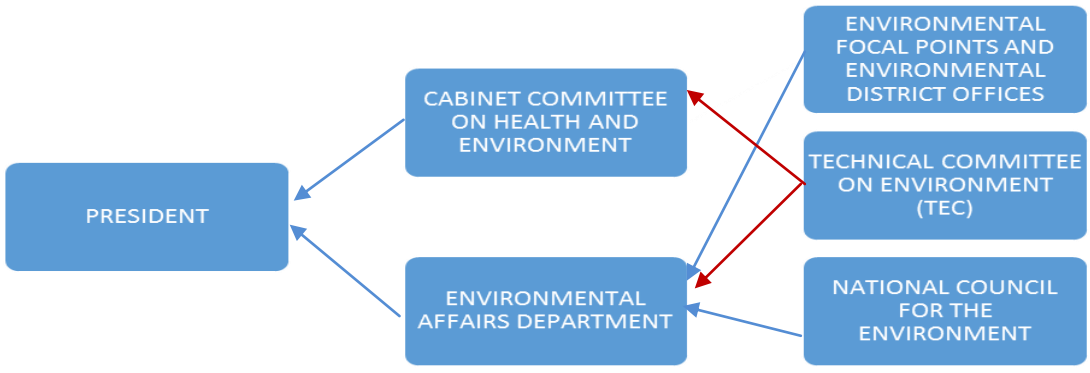

Figure 3.2: Environmental Affairs reporting structure

Source: (Compiled by author using data from SNDP website, 2014)

As stated by the Environmental Affairs Department (2010) the structural and legal frameworks for biodiversity conservation in Malawi is not comprehensive and remains a challenge at implementation and enforcement levels. This is despite the departments following a sectoral approach in terms of policy development that is consistent with the NEP and the EMA.

Apart from the NEP whose aim is to promote sustainable development, which also provides a framework for sectoral policies for biological conservation, the following are related legislation and policies. In no order, the first is the National Forestry Policy of 1996 and the Forestry Act of 1997 whose strength is the co-management of resources amongst stakeholders, but is weakened in that it not necessarily harmonized with the EMA and other Acts. The second is the National Fisheries and Aquaculture Policy of 2001 which controls and monitors fishing activities to improve the quality of livelihood for those people in fishing communities. The third is the National Land Resources Management Policy and Strategy of 2000 which aims to promote culturally acceptable technologies feasible in areas that are environmentally sensitive. Fourth is the Water Resources Management Policy of 1994, revised in 2004. The challenge with this policy is that it has no guidelines for the conservation and sustainable use of aquatic biodiversity. The fifth is the National Parks and Wildlife Act of 1992 which mainly concerns itself with wildlife management and protection by the authorities, which is easier to do in areas where communities are outside the park boundaries, a practical challenge in Lake Malawi National Park (Environmental Affairs Department, 2010).

3.4 Background of Lake Malawi National Park

3.4.1 Lake Malawi

Located at the southern end of the African Rift Valley, Lake Malawi is bordered by Malawi in the South and South West, Tanzania in the North and Mozambique in the North East, and has a total catchment area of 75,000 km² where 13 major river basins drain the lake (Malawi Government, 1994:1). It is the 3rd deepest and 9th largest lake on Earth and forms about 7 per cent of the total available surface fresh water on Earth (Bootsma & Jorgensen, 2006:259). On the African continent, it is the third largest lake with a total length of 568 kilometres and is 80 kilometres at its widest and covers

a surface area of 22, 490 km² qualifying it as a prominent feature in Malawi (Spong & Walmsley, n.d.,:3) as it forms about 20 per cent of total surface area of the country's 118 500 km².

Together with Lake Malombe and other rivers which form the Lake Malawi Ecosystem, Lake Malawi, supports over 600 species of fish of which all but six are endemic representing the greatest number of fish endemism in the world (Spong & Walmsley, n.d.,:4). This rich fish diversity which is attributed to the fluctuations in the levels of the lake makes Lake Malawi a great interest in as far as ecology and evolution is concerned (Abbot, 1996:38).

For Malawi, the lake is a significant water resource that plays an important role in the socioeconomic development of the country (Chipofya et al., 2012:152) although undervalued by statistics in terms of nutritional and national contribution as well as in the intensity of exploitation (World Bank, 2002:1). Like all rift valley lakes, it is a source of water supply for both commercial and domestic use, fish production, aesthetic value including aquarium trade, scientific value (Bootsma & Jorgensen, 2006:645; World Bank, 2002:1), and the basis of local transport (Chipofya et al., 2012:156). As a source of livelihood, the lake provides to almost 70 per cent of the population animal protein through fish consumption.

3.4.2 Lake Malawi National Park

Lake Malawi National Park is on geographical coordinates: 14º 02'S, 34º53' E. It was established under the National Parks and Wildlife Act (Cap.66.07), in 1980 as a Category II protected area, and declared a World Heritage Site in 1984 by UNESCO. The 94 km² Lake Malawi National Park (LMNP) was instituted with the aim of maintaining the integrity and authenticity of the area for the benefit of both the present and future Malawians through wildlife legislation enforcement, effective monitoring, adaptive management and governance, with all stakeholders fully involved (Department of National Parks and Wildlife, 2011:1–7). It is the first established fresh water, under water national park in Africa and the diversity of the lake's native fish species is unparalleled in the world with 400 documented species of cichlids of which all but five are endemic (Malawi Government, 1994:1).

The park has its centre on the Nankumba Peninsula but has a total of 13 islands and has an aquatic zone that extends 100 metres from the shore lines of the park (Department of National Parks and Wildlife, 2011:1–2). Out of its total area, 7 km² make up the aquatic zone which comprises of rocky shoreline that eventually gives way to sand of between 5 to 40 metres depth (Abbot, 1996:37).

Nankumba Peninsula is a point where the African rift valley splits into two: the *eastern rift valley floor* which extends towards Lake Malombe, through the Shire River into Zambezi River Valley; and the *western rift valley floor* relatively shorter in length and expressed by the Bwanje Valley and an extensive fault system running through Dedza, Ntcheu and Balaka escarpments and the upper middle shire valley. It has an altitude of between 473 and 1,524 metres above sea level and the rainfall is lower, erratic and variable along the lakeshore plain with the mean annual average of 762mm and 1,128mm in the higher areas (Malawi Government et al., 2007:5).

As an aquatic park, it supports a diverse population of birds and animals among them the African Fish Eagle, White Breasted Cormorant, Cape Clawless Otter, Spotted Neck Otter, monitor lizards, hippopotami and crocodiles. Mammals include the klipspringer, common duiker, rock hyrax, civet, baboons, velvet monkeys and blue monkeys. It further supports five fishing villages namely, Chembe, Mvunguti, Zambo, Chidzale and Msaka which are spread across the shores of the peninsula and although they are not gazetted as part of the park, they are completely surrounded by it (Abbot, 1996:38). Apart from the fauna, another major resource in the park is the flora and has been studied extensively by Abbot (Malawi Government et al., 2007:4).

In terms of resource accessibility, LMNP is different from other parks in Malawi since it has villages as enclaves in the park as designation of the park was only approved on a condition that the creation of the park was in no way going to interfere materially with the inhabitants way of life (Abbot, 1996:39; Department of National Parks and Wildlife, 2011:13). This causes management challenges as apart from engaging with tourist operators, park authority management have to engage with the villages as well. To deal with this and as a means of empowering the villages, the authorities established village trusts which they acknowledge to be less effective (Department of National Parks and Wildlife, 2011:33).

3.4.3 Chembe Village

Chembe village, the focus of this research, is the largest of the five villages in the park; which unlike other villages dependent on park resources, was not evicted from the park was stripped the responsibility of owning and managing the natural resources in the park by government during the colonial era. Although this is the case, the village livelihood impacts the park as it is not merely a park for them but a place they call home. (Malawi Government et al., 2007:9–10). This in addition to the lack of social and governmental regulation on access does provide an incentive to exploitation of the lake and its associated resources (World Bank, 2002:3) posing serious effects on how the resources are put to use and managed.

In as far as subsistence is concerned, the woodlands are of great importance to the communities judging from the products that are extracted from them which include bamboos, poles, thatch grass, hardwoods and vines for furniture and carved curios firewood for domestic use, and variety of fruits, and medicinal products among others. Other products harvested include grasshoppers, honey, termites and caterpillars (Abbot, 1996:281–283). Fishing is prohibited within the perimeters of the park (100 m from shoreline) although the lack of effective patrols expose the islands to exploitation by local fishermen as they are distanced from the shoreline (Department of National Parks and Wildlife, 2011:33). Apart from fishing, other activities the village benefits are tourism related though at a small scale. Unlike other villages in the park, Chembe is popular and relatively developed for tourism with tourist accommodation facilities and a dive school owned by foreign nationals, and local bars and accommodation units offering basic accommodation. The villagers do benefit at a lesser scale from tourist activities via selling of curios, and operating informal tour guiding services especially to the lower end of tourist market (Malawi Government et al., 2007:11).

A comparison of tourism and fishing in the park reflects that tourism if revamped and well-coordinated, can not only benefit, the park and operators through revenue, but can also improve the livelihood of the fishing villages. Figure 3.3 shows the location and components of Lake Malawi National Park.

Figure 3.3: Location and components of LMNP. Scale: 1:250,000

(Source: Malawi Government et al., 2007)

3.5 Wildlife Policy and Park Management

3.5.1 Overall Park Management

The management of park resources has been broadly categorised in three namely, wildlife, fisheries and forest all of which have specific government departments

responsible but because the area is protected, all resources in it are within the jurisdiction of the Department of National Parks and Wildlife (DNPW). Of these resources, the woodlands are the best managed as communities are allowed to pick dead wood for domestic use and DNPW offers an effective enforcement plan whereby permits are sold to whoever is interested in using the wood (Abbot, 1996:39). Other than that, the enforcement has proved ineffective due to financial incapability and inadequate people power to engage in effective monitoring. As a result their functions are reduced to problem animal control, terrestrial patrols and less aquatic patrols.

Another major challenge affecting park management apart from fragmented policy direction on a national level, is high population growth rates which exerts pressure on the natural resource base through unsustainable land and resource use translating further into poverty (Department of National Parks and Wildlife, 2011:16; Yaron et al., 2011:91). However as has become the trend amongst governments, the Malawi Government realises that one of the solutions is the devolution of ownership and management to local communities through co-management as specified in the Management Plan for 2006-2011 (Malawi Government et al., 2007:9) and in the revised Management Plan for 2012-2017. Such an approach has been extended to all principle stakeholders (Department of National Parks and Wildlife, 2011:20).

It is important to note that so long as human threat expressed by intensive resource exploitation is present, biodiversity cannot be conserved calling for co-management approaches to natural resources (Bootsma & Jorgensen, 2006). It has been argued that co-management of natural resources, as is not the solution to population growth challenges on natural resources it is likely to be resolved by diversifying the economic base of the rural communities thereby decreasing their direct reliance on the extraction of natural resources for their livelihood (Hara, 2000). This is a good view and from afar a better way of advancing development goals, however it is more appropriate in a situation where government or development partners have the financial capacity to diversify rural economies which for Malawi is yet to materialise (Malawi Government, 2012).

As indicated in both Management Plans, human relations in the park are a major setback to management objectives. These include conflict between villagers and park

management, and user group conflicts amongst beach boys (tour guides) and tourist operators (Department of National Parks and Wildlife, 2011:19–20; Malawi Government et al., 2007:9).

The park's management zones include special areas, wilderness areas, semi-wilderness zone, community resource use zones and the utility zone (Malawi Government et al., 2007:23) each of which is subdivided into management units depending on size and location as illustrated by Table 3.1.

Table 3.1: LMNP management zones

LAKE MALAWI NATIONAL PARK	ISLANDS	Maleri Islands	Nakantenga Nankoma Maleri	Semi-wilderness areas Utility Areas
		Cape Maclear Islands	Otter Island Domwe Island Thumbi West Island Mumbo Island Zimbabwe Rock	Semi-wilderness areas Utility Areas
		Monkeybay group of Islands	Thumbi East Island Mpanda Island Boadzulu Island	Special Areas Semi-wilderness Areas
		The Reefs	Chinyankhwazi Rock, Chinyamwezi Rock	Special Areas
	AQUATIC ZONE	100m strip of the lake, including the water surface, the water column and the lake bed		Semi-wilderness Areas
	MAINLAND	Cape Maclear Peninsula including Golden Sands		Special Areas Semi-wilderness Area Resource Use Zones Utility Areas
		Mwenya Hill Nkhudzi Hill Nkhudzi Spit		Wilderness Areas

(Source: Malawi Government et al., 2007:23)

In relation to the management of the park in context, this study draws focus on the Wildlife Policy and how it relates with other major frameworks with particular interest to community participation.

3.5.2 The Wildlife Policy in Lake Malawi National Park

As a source of biodiversity conservation and livelihood, the park is a hotspot and government cannot ignore the challenges in it that are leading to environmental

degradation caused by the immediate beneficiaries of the park. This raises the issue of empowering communities to engage in the participation of the management of natural resources that belong on their land. The wildlife policy takes into account all government strategies (NSSD, MGDS, Vision 2020) and MDGs which stipulate guidelines for the development of partnerships for collaborative management. This policy recognises that through the involvement of stakeholders and motivating them for active participation, effective management is achieved. The policy assumes that motivating stakeholders through benefits sharing is key to sustainable use and wildlife conservation. Benefit sharing is considered a symbol of government commitment towards the enhancement of stakeholder participation in wildlife conservation since 1996 and includes resource harvesting and revenue sharing. Its objectives include the achievement of equity and fairness in resource sharing and the motivation for sustainable use of resources by key stakeholders (Malawi Government et al., 2007:47–48).

Literature analysed (Muller, 2009; Roberts, 2011; Rossouw & Wiseman, 2004) seeks to link and support the description of the Lake Malawi National Park case study. For Muller, the challenges of environmental governance which include the fragmentation of government departments makes it difficult for execution of duties (Muller, 2009:73). In this case study, the same applies as it has been noted that although Malawi has necessary legislation in place, it still faces challenges in implementation of its policies. This partly owes to the fact that there is a lack of inter-departmental collaboration.

3.6 SUMMARY

This chapter gave a description of the case study. In the introductory section it was indicated that Malawi is a low income sub-Saharan country but that it is rich in its natural resource base, among them Lake Malawi, Africa's third largest Lake which is rich in its biophysical components as it lies at the end of the great rift valley and boasts a lot of fish endemism. As a country, Malawi depends on these natural resources for development. Unfortunately these resources are rural based where poverty is rampant perpetuating the dependence on natural resources. The second section gave a background to the case study by introducing Lake Malawi National

Park as the world's first fresh water reserve, and a UNESCO World Heritage Site declared in 1984. Of interest to the park is the way five villages are enclaves of the park (Chembe Village being one of them) as historically, the park was a communal area and remained so until its proclamation. This presents a different case from Malawi's protected areas where villages are on the peripheries of the park, presenting a practical management problem. Further stated that the park is managed in terms of its resources and that includes fisheries, tourism and forestry. It was discussed that although tourism brings in revenue, its status is dwindling as the numbers of tourists reduce with each passing year. A major reason cited in management documents includes the conflicts and misunderstandings of stakeholders in the park, as well as their poor relationship with park authorities. This, the park authorities realise affects co-management of resources.

In conclusion, the governance section indicates that despite having a legal and policy framework in place, implementation is still problematic as there are challenges regarding the involvement of stakeholders which makes participatory management of the national park a challenge.

The next chapter will present an analysis of field data that explain why implementation remains a challenge in Lake Malawi National Park.

CHAPTER 4: ANALYSIS AND SYNTHESIS OF STAKEHOLDER COLLABORATION IN LAKE MALAWI NATIONAL PARK

4.1 INTRODUCTION

This chapter presents an analysis and synthesis of the data collected during field work. Four questions guided the research towards the achievement of the research aim. To provide a coherent flow of the findings, the chapter has been structured in a way that each research question is followed by an analysis and its findings which have been organised in different formats including tables, figures and boxes. These findings will be used to evaluate community participation in Lake Malawi National Park and conclude if it is adequate for effective management of the park (co-management). Further, the aim of this chapter is not only to link to the theoretical chapter, but to build on it through the development of a new management strategy. This analysis and synthesis has been organised in four sections namely; introduction, analysis and synthesis, application of theory and a conclusion.

It is important to recall, as discussed in chapter 2, that a system is made up of "elements" and "relationships among the elements" and therefore that each systems knowledge is made discoverable by *firstly*, elements identification, *secondly*, description of relationships among the elements, *thirdly*, an understanding of how these elements and relationships interact dynamically to produce different positions of the system (giving rise to emergent properties), *fourthly*, an interpretation through discovering the type of unity that the system is representing and *fifthly*, identification of the logical effects of elements on others defined as “intrasystemic inferences” and *lastly*, an analysis of effects of the outside influences, "extrasystem inferences” so as to find out if these effects are similar to logical expectations. This has implications on how a systems research approach is carried out as it has to be guided by two research questions: "what are the components/elements of the system" and "how are the components/elements related to each other?" These questions are always in sequence as it is not possible to look at relationships before components have been identified (Northcutt & McCoy, 2004: 27–28).

The following sections discuss the study in relation to what has been argued by Northcutt and McCoy (2004), thus the two questions will lead to an intrasystemic inference because this is what the study is concerned about, and because adaptive systems are open, extrasystemic inferences will be made through linking policy and other strategies to the field work findings.

4.2 ANALYSIS AND SYNTHESIS

4.2.1 Research question 1: Who are the local stakeholders?

For any territory, groups and individuals will always recognise relevant opportunities, values and risks and once properly organised may express their interests effectively thereby increasing their involvement in management of the said territories. These are either referred to as "stakeholders," "relevant social actors," "institutional actors" or "strategic groups" (Borrini-Feyerabend et al., 2004:39). Lake Malawi National Park has three primary stakeholders situated within the park perimeters and they include park authority management, villagers and lodge operators.

Different authors classify these stakeholders according to the issue being investigated. For example, Mannigel (2008:1) uses the term "institution" to refer to park authority management and the rest as other stakeholders. In this study however, the researcher argues that such a breakdown undermines the very essence of community and could as well be described as part of the cause of why policy implementation is a challenge in natural resource management of protected areas. She therefore adopts the use of the term "stakeholder" to mean all actors present in the park and "community" to mean all actors in totality as such a view better manifests the complexities surrounding governance issues. Figure 4.1 provides a presentation of the stakeholders who make up the Lake Malawi National Park Community.

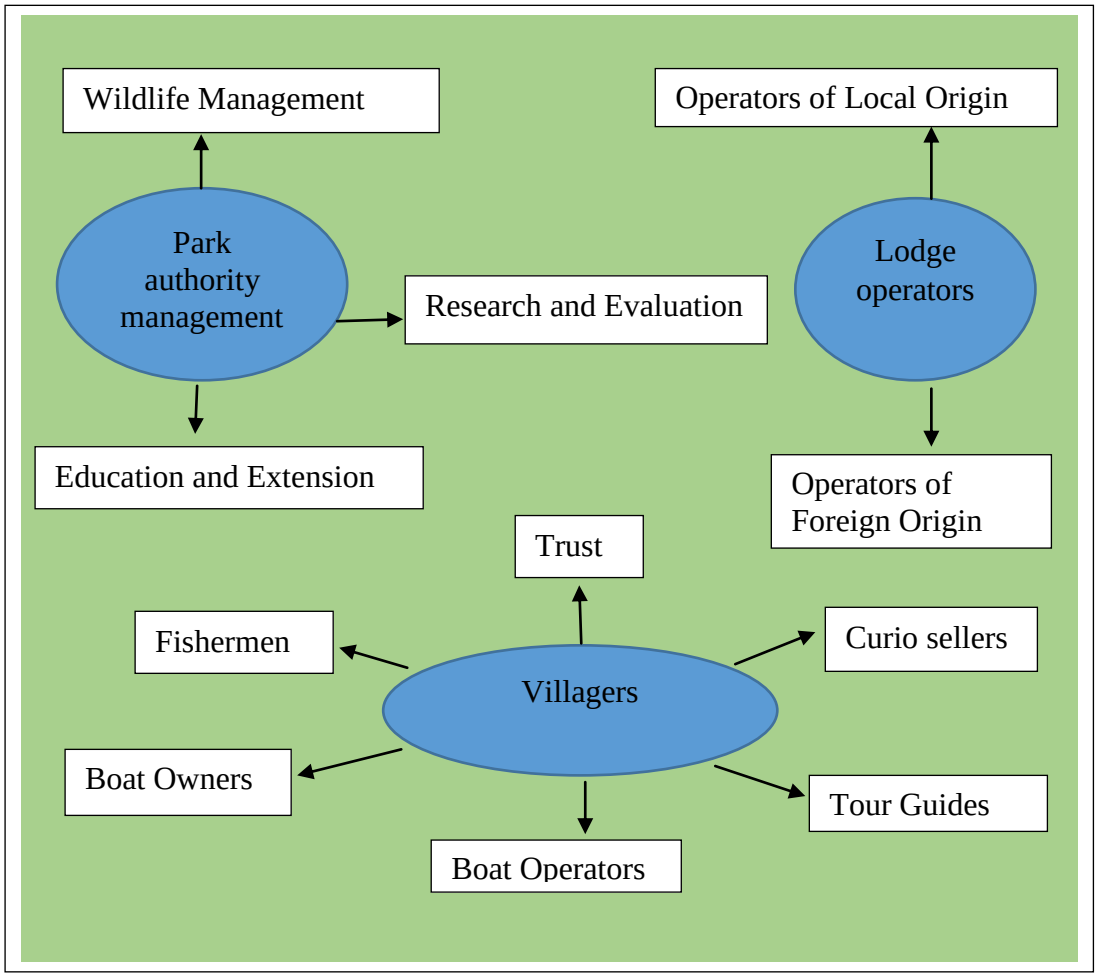

Figure 4.1: Composition of the LMNP Community (field data)

(Source: Compiled by author, 2014)

The following sections provide a description of these stakeholders.

4.2.1.1 Park authority management

The definition of park authority used herein is borrowed from the general definition of Protected Area Authority which refers to an agency that is given authority through legislation to manage protected areas in a country (Reed, 2002:10). In Malawi, DNPW is mandated under the National Parks and Wildlife Act of 1992, and as amended in 2004, to carry out this function. In this study, focus is on LMNP authority managers and not protected area authority managers at the national level. Park authority managers will therefore be defined as those officers executing the functions of the protected area authority in this case LMNP.

The role of park authority managers in this park is to oversee the protection and conservation of natural resources within it for the benefit of present and future generations; it has a Park Manager who oversees three sections namely: Wildlife Management, Education and Extension; and Research and Monitoring. The responsibility of the Wildlife Management Section is to manage wildlife resources through law enforcement, reduce human-wildlife conflicts and engage in revenue generation. Because of the nature of their job, they are based at the Golden Sands Complex, Cape Maclear, Mangochi, a walking distance from Chembe Village, the study area. The Education and Extension Section is responsible for creating awareness through community meetings and creation of school groups; whereas the Research and Monitoring Section coordinates scientific research conducted in the park. These last two sections have their bases in Monkey Bay, Mangochi, but do operate to Cape Maclear on a regular basis as required by their jobs. This structure is not particular to LMNP as it also applies at headquarters level and follows suit in all other national parks.

4.2.1.2 Lodge operators

In this study lodge operators are those people who came to LMNP with the intention of operating a business with respect to providing accommodation and other related services to tourists. The park has two categories of lodge operators within Chembe Village; operators of local origin (Malawian nationals) and operators of foreign origin. Table 4.1 presents a description of this stakeholder group.

Table 4.1: Summary of lodge operator stakeholder group (field data)

Category	Background Information of Respondents	Place of Origin
Local	Assistant manager of a locally owned lodge. He co-manages the lodge with a fellow Malawian, and has been working at the lodge since 2005.	Chembe Village
Foreign	Owner and Manager of a lodge. He moved to the Park in 2007 from the United Kingdom where he had resided for 15 years. He initially followed his wife,now operates a lodge in the Park since 2009. His wife continues to serve in the community as a medical doctor since 2006.	South Africa

(Source: Compiled by author, 2014)

An interesting arrangement in the park is that, due to the specifications of the park, the villages, although inside it are not part of the it and the lodges although on the beaches of the protected waters are not "inside" the park too. This means that the lodges are part of Chembe Village where land is customary and is therefore given to operators on a lease agreement with the terms of the contract dependent on the owner(s) of the land which most of the time ranges from 15 to 20 years subject to renewal, during which they are required to pay land rent to the landlords at an agreed amount, and in the event that a contract is not renewed the property automatically belongs to the landlord.

4.2.1.3 Villagers

These are the local people under Chief Chembe, whose area of authority falls within the practical categorisation of the LMNP. Chembe Village, the study area has within it, various subgroups. In dealing with the complexity, this study only focussed on those that were primarily related to the management of the park when it comes to the main activity for revenue generation which is tourism. A total of six groups were represented and these include: tour guides, boat owners, boat operators, curio sellers, fishermen and Chembe Trust. This trust is one of the six trusts that were formed by DNPW in all the six villages inside the park to manage the affairs of villagers in terms of resource use and management. Important to highlight is that it falls under the jurisdiction of a Group Village Headman, who reports to the Traditional Authority-head of a territory. As a trust, it represents all sections of villagers on issues of conservation. In this case therefore, the trust although technically covering all the subgroups of the villagers, will be treated as a stakeholder sub group managing the welfare of the villagers who are not in the other sub groups.

During the interviews it was realised that one of the villagers interviewed belonged to different categories as he owned and operated a boat, was a fisherman and did provide tour guiding services. The researcher therefore capitalised on this complexity as finding different representatives for each of these sub groups would be an attempt to simplify it and therefore not representative of reality. Table 4.2 presents a description of this stakeholder group.

Table 4.2: Description of the villagers' stakeholder group

Category	Category Description	Personal Background of Respondents	Place of Origin
Trust Chairperson	Act as a link between villagers and park authority management in conservation and sustainable resource use; and is responsible for village welfare	A Pemba Chief of Chewa Origin, born in Chembe Village. His responsibility is to work with Park Authority Management on issues of conservation and use of the Park resources	Salima
Curio seller	Sculpts and sells curios to tourists in the park	Migrated to Chembe in 1984 with parents to further their curio selling business	Nkhotakota
Fisherman	Catches and sell fish to the community and tourists for a living	Born in Chembe Village	Chembe Village
Boat owner	Owns and hires out boats for various activities on the lake		
Boat operator	Hires out and operate boats for use on the lake		
Tour guide	Provides guided tours to tourists visiting the park		

(Source: Compiled by author, 2014)

4.2.2 Research question 2: What is the relationship between each stakeholder and the park?

This question assessed each group's relationship with the park drawing from personal experiences of the respondents. This was measured in terms of direct benefits derived, how long they have stayed in the park, and how long they intend to stay.

4.2.2.1 Direct benefits derived from the park

Results show that all stakeholders interviewed had in common, a positive relationship with the park. That is to say, they depended on the park to derive various benefits ranging from business opportunity, employment, source of livelihood from the use of resources and a sense of empowerment. The study observed that although park authority managers did not indicate the type of direct benefit they derive from the park, it was obvious that it created employment for them and this observation has since been included in this synthesis as it completes the stakeholder benefits that show similar values attached to the park.

Although the benefits vary according to stakeholders they remained similar amongst sub groups within each stakeholder group. For instance, both the foreign and local lodge operators indicated that their businesses were dependent on the aesthetic values of the park. In particular, the foreign operator category respondent specified that the park was important because it protected cichlids locally known as '*Mbuna'* which his clients enjoyed to see during boat trips. For the local operator, the park provided a relaxation space for his clients who escaped the "hustle and bustle" of town as it offered a quiet and serene ambiance.

For the villagers, it was interesting to note that the values they attach to the park included empowerment as they all stated with pride that *"masiku ano mphamvu zili ndi ife eni a mudzi chifukwa azungu amafikira mmudzi muno"* (we feel empowered these days now that we receive white tourists in our village). Although this may seem trivial in other contexts, in Lake Malawi National Park it is valuable. This is because previously when Golden Sands Tourist Complex (government owned facility) was functional, tourists' activities were mostly organised from the complex with minimal benefits into the village, if any.

Other direct benefits to the villagers included finances through business operations and a sense of livelihood through use of resources at household level. Table 4.3 summarises the relationship each stakeholder group had with the park in terms of benefits.

Table 4.3: Summary of direct benefits derived by stakeholders

Type of benefit derived	Lodge operators	Villagers	Park authority management
Business opportunity	√	√	
Source of livelihood in use of resources		√	
A source of relaxation	√		
(Employment)			√
Empowerment as a result of white tourist visits		√	

(Source: Compiled by author, 2014)

4.2.2.2 Length of stay

Duration of stay was another theme that emerged from stakeholder responses. This confirmed the importance stakeholders attach to the park apart from the varying reasons summarised in Table 4.3 The average minimum length of stay was 8 years and was a characteristic for the lodge operators' stakeholder group, whereas the average maximum length of stay was 33 years and appeared in the indigenous peoples' stakeholder group. Table 4.4 below summarises this theme.

Table 4.4: Length of stay of stakeholders in the park (field data)

Stakeholder Group	Category	Number of Years	Average Number of Years	Intention to Relocate
Lodge operators	Local	9		None
	Foreign	7	8	None
Villagers	Trust Chair	34 and over		None
	Curio Seller	30 and over		None
	Tour Guide			None
	Fisherman			None
	Boat Owner			None
	Boat Operator	34 and over	32.67 and over	None
Park authority managers	not relevant			

(Source: Compiled by author, 2014)

In summary the research revealed that all stakeholders enjoyed benefits from the different values they attach to the park confirmed by the striking similarity across all respondents “no intentions of moving out of the area” expression. This confirms previous work on protected areas that despite being areas of universal beauty they create numerous benefits for those in and around them (Secretariat of the Convention on Biological Diversity, 2008:v).

4.2.3 Research question 3: What is the relationship between stakeholders?

This research question was asked in order to identify the hidden dynamics in the relationships of the park community as an understanding of these dynamics leads to answering the main aim of the study and explains as to why much progress has not been made regarding community participation with respect to park management. The first relationship analysed was between park authority managers and other stakeholders (lodge operators and indigenous people), and then between lodge operators and indigenous people.

4.2.3.1 Park authority management and other stakeholders

Two themes: contact with park authority management and interference of the same stakeholders in the daily lives of other stakeholders emerged from the data regarding park authority management and is discussed in the following sections.

4.2.3.1.1 Contact with park authority management

When asked about their relationship with park authority management on separate accounts, both sub groups of the lodge operators indicated with concern that the former was less visible in terms of their daily activities as it was not clear what functions they carry out on a daily basis. The local lodge operator sub group specifically bemoaned the lack of meetings in the park and argued that when called for, these meetings were used by the authorities to communicate the decisions already made on various issues that affect the park and its inhabitants in one way or another.

Both sub groups of lodge operators however, felt that park authority management had room to improve their relationship with other stakeholders for them to make a significant impact. They suggested holding meetings on a regular basis and spearheading different activities like cleanliness as means with which the authorities can improve their visibility and maintain desirable relations. Table 4.5 summarises this discussion.

Table 4.5: Level of Park authority management contact with community as perceived by lodge operators (field data)

Status of Park Management	Local Operators	Foreign Operators
Visibility of officials on community builiding	Low	Low
Visibility of officials on enforcement	High	High
Potential to improve	Yes	Yes

(Source: Compiled by author, 2014)

On the other hand, the indigenous peoples' stakeholder group, being the largest and most diverse group in the park also had varying responses regarding their relationship with the authorities. All sub groups acknowledged the effort by park authority management in sensitizing them on the protection and conservation of the resources in the park through environmental education, which they said had led to more benefits being derived by the village, with one particular respondent stating that in the absence of the authorities all these benefits would have ceased by now and life would be difficult. This stakeholder group however differed when it came to relationship building. Whereas the chairperson of the Chembe Village Trust was aware of the functions and efforts by the park authority management, the other village sub groups, like the lodge operator group, were not sure of the exact role of the same. This had a negative effect on the way relations were viewed and strengthened in the park as stakeholders did not appreciate each other's roles due to failure to communicate. Table 4.6 is a summary of this discussion.

Table 4.6: Level of Park authority management contact with community as perceived by Villagers (field data)

Status of Park Management	Trust	Curio Seller	Fishermen	Tour Guide	Boat Operator	Boat Owner
Visibility of officials on environmental education	High	High	High	High	High	High
Visibility of officials on community building	High	Low	Low	Low	Low	Low
Visibility of officials on enforcement	High	High	High	High	High	High
Room to improve	Yes	Yes	Yes	Yes	Yes	Yes

(Source: Compiled by author, 2014)

4.2.3.1.2 Interference of park authority management in daily lives

All stakeholder groups shared similar sentiments regarding this theme as they indicated that there was minimal but significant interference of park authority management in their daily activities. Lodge operators attributed this to the inability of the former to work with other stakeholders. This interference was in two ways: park entry fees collection experienced by all stakeholders and use of forestry resources experienced by the indigenous peoples' stakeholder group.

All stakeholder groups stated with discontentment the approach used in the collection of park entry fees which involves park scouts conducting random patrols on the islands, the protected waters and hills and when tourists are found, are coerced to pay immediately at gun point which they said is a bother to their clients. Besides this military approach, all stakeholders stated that these officers on duty were sometimes not in uniform, and did not always carry with them GRs (government general receipts) making the motive behind the exercise questionable.

This and other challenges were emotionally narrated by the villager who belonged to the fishermen, boat owners, boat operators and tour guides sub groups, and has been captured in Figure 4.2.

I am grateful to the park authority managers for ensuring that my businesses are sustained through the different interventions but I am not happy with the way they make decisions which continue to make life for villagers increasingly difficult. As a tour guide, I feel the lake patrols are a disturbance to boat trips since the officers usually carry fire arms. This is not good for tourists who sometimes come from conflict zones and come to this park in search for peace. Previously, as tour guides, we could pass through the Golden Sands revenue office for payment but this arrangement died a natural death as it was found that the re-route was a cost in terms of fuel for our vessels. At the moment we cannot collect park entry fees on behalf of government because in the event that we do not meet an officer on patrol, we will be forced to keep the money, yet fail to issue receipts to our clients.

As a fisherman, I fish in public waters, but during storms, I am forced to dock on the nearest island for safety and warmth something that authorities consider as encroachment on the protected area. As a boat operator, there is a new regulation put in effect yesterday (12 May, 2014) that requires us to pay for our vessels every time they go on the lake. This, I want park authority management to know that we are not amused with it because for us villagers, we feel it is an infringement on our rights because when this park was being established, an agreement was made not only to keep our villages undisturbed, but also to allow us to earn a living from the parks' resources. So now what are the benefits for us as a village then? How do we differ from visitors?

Figure 4.2: Villager's narration of interference of park authority managers (field data)
(Source: Compiled by author, 2014)

On the use of forestry resources, there was varying reaction amongst the concerned on the level of interference at household level in terms of resource use, they differed on the nature of resource. For the curio seller, strict regulations and enforcement towards the cutting down of trees when households need trees as building material, was regarded as a harsh measure; whilst for the trust chairperson, concern amongst villagers was more on the collection of dead wood for firewood which at that moment was being collected at a reasonable fee of K20 (equivalent of US Cents 5) a day (collection of any amount of dead wood in the park is only legal if one buys a permit which is sold on a daily basis at the said fixed fee).

The villagers observed further that due to the lack of an office in the forests, park scouts only collected fees when they met villagers, meaning that it was possible for one to escape payment in the event that they are not met by the scouts, a challenge to

revenue collection. To curb this practice, the scouts confiscated the firewood and burnt it, a practice perceived as inhumane by the villagers because by the time they get to the village, the distance they have covered is usually long.

These two challenges regarding the collection of park revenue were realised in the study to be a constraining force to a healthy relationship amongst community members especially towards park authority management. On its part however, the latter indicated as a major challenge the fragmented nature of the park which they argued makes it difficult to permanently situate officers for collection of revenue and patrol of protected areas. By implication, this will remain a challenge for as long as the park and the people co-exist if no practical solutions are made. Table 4.7 summarises the discussion.

Table 4.7: Interference of Park authority management on other stakeholders' daily lives (field data)

Stakeholder		Park entry fees collection	Dead wood fees collection
Lodge operators	Local operator	Yes	Not Applicable
	Foreign operator	Yes	Not Applicable
Villagers	Trust	Yes	Yes
	Curio seller	Not aware	Yes
	Tour guide	Yes	Yes
	Boat operator	Yes	Yes
	Boat owner	Yes	Yes
	Fisherman	Yes	Yes

(Source: Compiled by author, 2014)

Knowing therefore that no individual stakeholder can solve the challenges this study asked the respondents how they felt the challenges would better be resolved. They made a series of recommendations. Table 4.8 presents a summary of these proposed recommendations.

Table 4.8: Stakeholder solutions to park fees collection procedure (field data)

STAKEHOLDER SUB CATEGORY	SOLUTION PROPOSED
Lodge operator (local)	Stakeholders must sit and discuss, consider erecting a boom gate at the park boundary like in any other national park in the country
Lodge operator (foreign)	Park authority management must patrol the protected areas on a daily basis or consider erecting a boom gate at the park boundary like in any other national park in the country
Curio seller	Park authority management must find a practical way because it is their responsibility, boom gate not a solution
Chembe Trust Chairperson	Park authority management must recruit and train a village team and entrust them with this responsibility, boom gate not a solution
Tour guide, Fisherman, Boat owner, Boat operator	Park authority management must patrol lodges on a daily basis, boom gate not a solution

(Source: Compiled by author, 2014)

From Table 4.8, the willingness of stakeholders can be seen towards finding lasting solutions to the challenges they face on a daily basis. It is obvious there is no single solution to the challenge of park fees making it difficult for park authority management to rectify. However suggestions were made that if stakeholders convene regularly in a fair and equal forum, problems will not only be solved amicably but relationships will also be built. Of particular interest is the willingness to make a recommendation by the Curio seller who in expressed ignorance over park entry fees (See Table 4.7). This reaction further indicates the importance of the need to have stakeholders involved in decision-making as requested by the latter themselves.

A critical point to further note (See Table 4.8) is that all villagers regardless of their sub groups were strongly against the erection of a boom gate as a solution to park entry fees collection. When probed, they argued LMNP is a very unique park unlike the other national parks in the country because it has villages as enclaves. Erecting a boom gate would therefore imprison them because no village in Malawi has a boom gate at its point of entry. This was in contrast to the view of lodge operators who felt that this boom gate was not only going to be a solution to revenue collection but would also limit different sorts of crimes the park is prone to.

4.2.3.2 Villagers and lodge operator relationship

Although the villagers are categorised in various sub groups, data suggested they live in harmony with lodge operators as they understood that a good relationship between the two stakeholder groups is vital for the survival of both.

Two significant challenges that emerged include misunderstandings of land lease issues which is usually solved by concerned parties with the help of the Department of Tourism and Ministry of Local Government (villages fall under the this Ministry) as alluded to by the Chairperson of the Village Trust, but will not be discussed herein since it is outside the scope of this study. The second, and most critical, is misunderstandings between tour guides and lodge operators. This challenge as noted from park documents has existed for a while and presents safety and security challenges to tourists leading to the crippling of the already suffering park fees collection. The findings are discussed in section 4.2.3.2.1.

4.2.3.2.1 Tour guide and lodge operator conflicts

When interviewed, all stakeholder groups (including park authority management) mentioned this conflict and argued that it was a strain to relations in the park. The lodge operators and tour guides specifically indicated that it was a challenge to their business operations as they were mutually interdependent. The curio seller for instance mentioned that his business thrived most when tour guides' relations with lodge operators was healthy because the former directed tourists to curio kiosks.

The lodge operators attributed the cause of this conflict to the lack of tour guide training in the area making them reluctant to commit their clients to village tour guides. They however, acknowledged the strength of the challenge in that, this was one way of giving back to the village (corporate social responsibility). Lodge operators were therefore of the view that if the Department of Tourism could facilitate tour guide training, the challenge of a lack of trust between these groups would be resolved to a great extent. They indicated that in order to restore harmony, they resorted, as a temporary measure, to practically solving the issue by helping tour guides to create an association; building a waiting bay (refer Figure 4.3) so as not to linger around the area; buying of aprons; and printing of each of their names on them for easy identification. Further, to ensure that there are no fights regarding equal

sharing of business, tour guides were organised in groups of seven or eight and rotated on a weekly basis. Such an arrangement offered them considerable access to lodges as long as they were disciplined and closed business by 5 pm daily.

Figure 4.3: A make shift waiting bay for tour guides (field data)

(Source: By author, 2014)

On their part, the tour guides were content with this arrangement and admitted it helped improve their relationship with lodge operators. They however pointed out that although they now offered their services to most of the lodges, there were still few lodges that did not recognise these services. These were especially those that owned boats and had their own tour guides trained to their satisfaction. Although a challenge, these tour guides concurred with lodge operators in the need for formal tour guide training as they argued that even at the lodges that did not need their services, they were allowed to camp outside their gates which for them was an indication that if formally recognised, they could be allowed access to clients.

4.2.3.3 General state of stakeholder relationships in the park

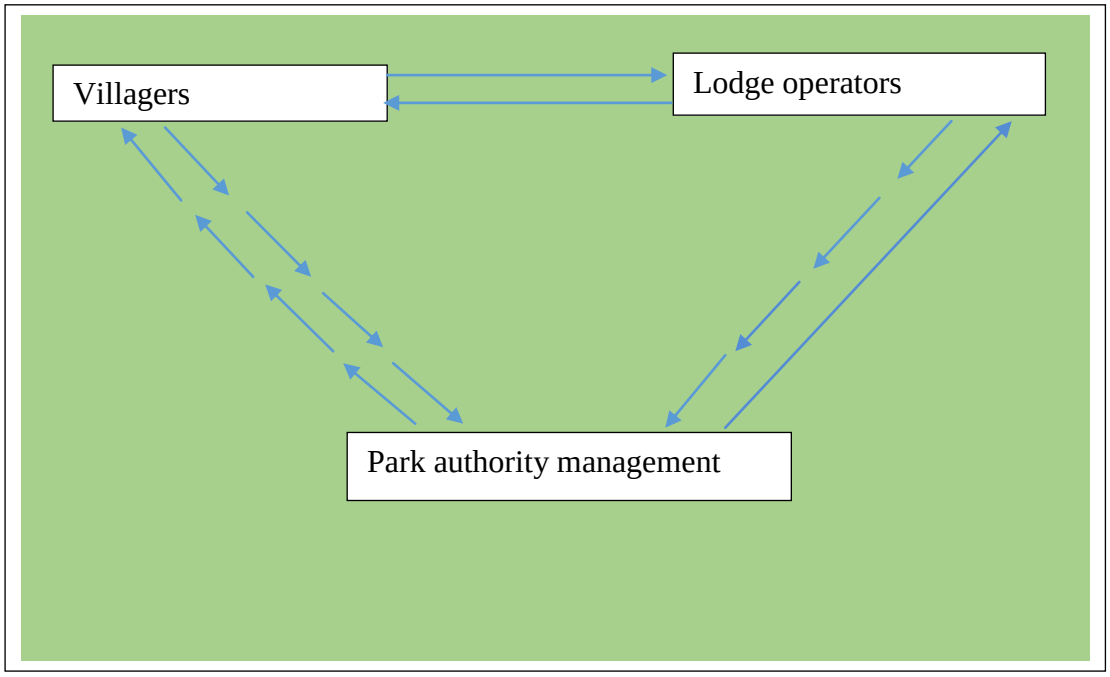

Figure 4.4: A simplistic presentation of relationships in the park (field data)
(Source: Compiled by author, 2014)

In summary, figure 4.4 presents the summary of relationships in the park showing that the villagers and the lodge operators had a satisfactory two-way relationship whilst experiencing an unsatisfactory relationship with park authority management. Park authority management, on the other hand, reported experiencing a satisfactory relationship with lodge operators and unsatisfactory relationship with villagers.

These findings are a deviation from the expected in that, contrary to the LMNP management plan and the general perception by the Department of Tourism (which shaped the researcher's perception before the research), lodge operators and villagers were mutually satisfied with their relationship. The study further showed that park authority management and not villagers were at the centre of unsatisfactory relationships in the park. This is because even in the case where park authority

management were content with their relationship with lodge operators, the opposite was reflected in terms of the latters' perceptions on the same relationship. This novel finding could be explained by the willingness and ability of the two stakeholder groups to constantly find means of resolving their misunderstandings as they arise. In contrast the same two non-State stakeholder groups which were able on one hand, failed on the other, to penetrate through the State actor's zone to make considerable changes towards satisfactory relationships. Such a dynamic has been interpreted further in section 4.3 where theory is aiding the explanation.

4.2.4 Research question 4: Is the present level of collaboration amongst stakeholders adequate to enhance community participation for effective co-management of the park?

Understanding co-management processes demands that one understands the playing field as much as possible requiring the "analysis of relevant social actors, their mutual relationships, the context in which they live, their management claims and justifications-foundations, motivations, historical roots-they put forth for them" (Borrini-Feyerabend et al., 2004:47).

Literature presents two pre requisites for co-management namely: a common purpose and collaborative relationships (Schusler et al., 2003:312). Although this study reveals that the stakeholders shared a common purpose in the park through their individual relationships with the park, the relationships amongst them operate below the desired level which is not sufficient for effective co-management. The desired level of collaboration necessary for management effectiveness, best defined as governance of natural resources, is highly dependent on the context (Dearden et al., 2005:98–99; Muller, 2009:74). In this context, there was a broken link in communication as park authority management worked on the assumption that they are on good terms with other stakeholders when other stakeholders saw no working relationship with the authorities expressing the need to collaborate more and make park management more inclusive. This dissatisfaction of other stakeholders reflected during the interviews indicates that the level of collaboration is currently not adequate to enhance community participation.

It has been argued that stakeholders' willingness (determined by 'entitlements') and organisational capacity to co-manage, justified by their claims can help evaluate whether a community is able and willing to join in management of a natural resource. An entitlement is a socially dynamic construct that can only be defined within a particular social context and is linked to a stakeholder's benefits. In the management of natural resources, it does not mean exclusivity or extreme powers, but a legitimate claim for participation in one or more management activities deemed relevant by the stakeholders themselves (Borrini-Feyerabend et al., 2004:47–49). This study shows

that despite having a broken communication link, stakeholders in LMNP are willing to co-manage but lack organisation at a stakeholder level.

As suggested by literature stakeholders need to establish a Multi-Stakeholder Process (MSP) which is necessary for the improvement of their effective participation in management. An MSP brings all major stakeholders together to improve communication through decision finding and decision-making on specific issues (Hemmati, 2002:2). The study indicates that stakeholders, in particular, the lodge operators and the park authority management, described such a similar process as having been established through the creation of Lake Malawi National Park Association (LAMANAPA) in 2013. Although the main function of this association is to administer revenue sharing, stakeholders believed it would be able to resolve most of the challenges due to wider representation thereby improving relations which are necessary for collaboration.

Whilst this was so, the lodge operators noted that since LAMANAPA's first meeting held at the beginning of the 2013/14 government financial year, where they discussed the formation of the group, no other meeting had been held. And in a separate case, the park authority management indicated that the formation of LAMANAPA faced registration challenges as the Registrar General took time to provide feedback. The park authority management indicated during the research that feedback had just been received and that registration was unsuccessful because the organisation was using "Malawi". Park authority management was scheduling a meeting at the time of the interview to inform other stakeholders of this application status and to discuss the way forward.

Meanwhile, from the interviewed villagers, no indication of the existence of the association was made. However, being that this stakeholder group is diverse, and acknowledging that no attempt was made to ask them, the research makes the assumption that some members who were not interviewed should have been aware of the grouping but that communication flow was a major challenge facing the whole community. This, if not looked into can jeopardise the reason for the formation of the group.

4.2.4.1 Participation levels in Lake Malawi National Park

From what has been discussed, an assessment of participation levels can be made and can hence determine whether it is adequate for improving effective management of the park by the community of stakeholders. Although the definition of participation is vague, two different approaches can be used to allow for analysis, "Participation as a *means* to increase efficiency" and "Participation as an *end* for empowerment and equity" (Mannigel, 2008:499). Figure 4.5 presents a framework for assessing these levels of participation.

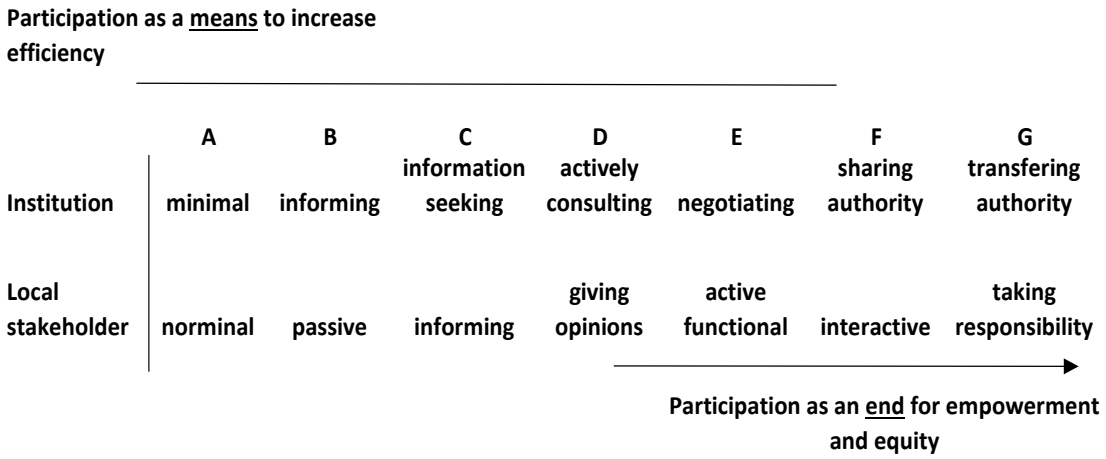

Figure 4.5: Different understandings of participation
(Source: Adapted from Mannigel, 2008:499)

An application of this framework in understanding the levels of participation in LMNP confirms literature reviewed that for State actors (park authority management), participation is a means, whereas for non-State actors, participation is an end. This is because whereas the park authority management was relatively satisfied with their progress in their relationship with other stakeholders, the latter expressed discontentment.

With this framework, when State actors view participation as a means, decision-making power is not shared with other stakeholders (the current situation in the park) leading to the rare use of levels E, F, and G. Again, levels A, B or G are not viewed as participatory since either park authority management or other stakeholders are only involved in the decision-making of management activities from a distance (Mannigel, 2008:500).

Participation in LMNP on this scale, can therefore be explained around levels A, B and C which is relatively sufficient as a means to promoting efficiency. However, from a governance perspective, this is far from adequate since governance is not a means to efficiency but a solution to environmental problems thereby requiring a network of stakeholders for active participation and not only a common focus (Muller, 2009:68), which was the desire in the park.

4.2.4.2 Co-management levels in Lake Malawi National Park

At this stage, it is critical to note that in practice, co–management is said to be effective at a level where potential actors become empowered and responsible. This process occurs in stages that see the actor moving from a potential to a *responsible* actor (Borrini-Feyerabend et al., 2004:63).

According to Borrini-Feyerabend et al. (2004), when a *potential* actor recognises the associated values, opportunities and threats within their territory and are able to self-organise, they become responsible actors. This ability to self-organise is made possible by the freedom of expression and a fair representation system which allow for their ability to access relevant information regarding the resources thereby becoming *relevant* actors. When these relevant actors are able to make known their interests aided by the absence of social discrimination, a fair hearing in terms of grievances and the political will towards participatory democracy, they become *entitled* actors. Once entitled, an actor is able to enter into negotiations and participate efficiently by becoming part of the team that sets and enforces rules for equal sharing of benefits guided by entitlements. This is further supported by the creation of negotiation platforms and actors capability to negotiate. Such a capability, coupled with the use of the languages of the actors concerned promotes impartial facilitation leading to effectiveness of co-management. And once this is achieved, the entitled actors can safely be said to have become *empowered*.

Empowered actors share benefits and responsibilities as deemed relevant and are able to contribute to such processes in any possible and convenient way. That is to say that they “learn by doing”. This is the most challenging level as it requires democratic experimentalism in order to accept a totally new system of doing things; the flexibility of others to allow experience or experimentation in execution of plans; and to be able

to enforce those negotiated agreements effectively. It is only when this stage is reached that an effective co-management partnership is formed and empowered actors become *responsible* actors (Borrini-Feyerabend et al., 2004:63). In LMNP stakeholders can be said to be entitled actors but lacking a higher level of organisation, a major hindrance to effective co-management.

For a visual perspective, Figure 4.6 presents this effective co-management scale. It should be noted that this is an idealised view for purposes of the easy understanding of the process as in practice. Stages do not necessarily follow the pattern as presented by Borrini-Feyerabend et al. (2004) and as adopted in this study.

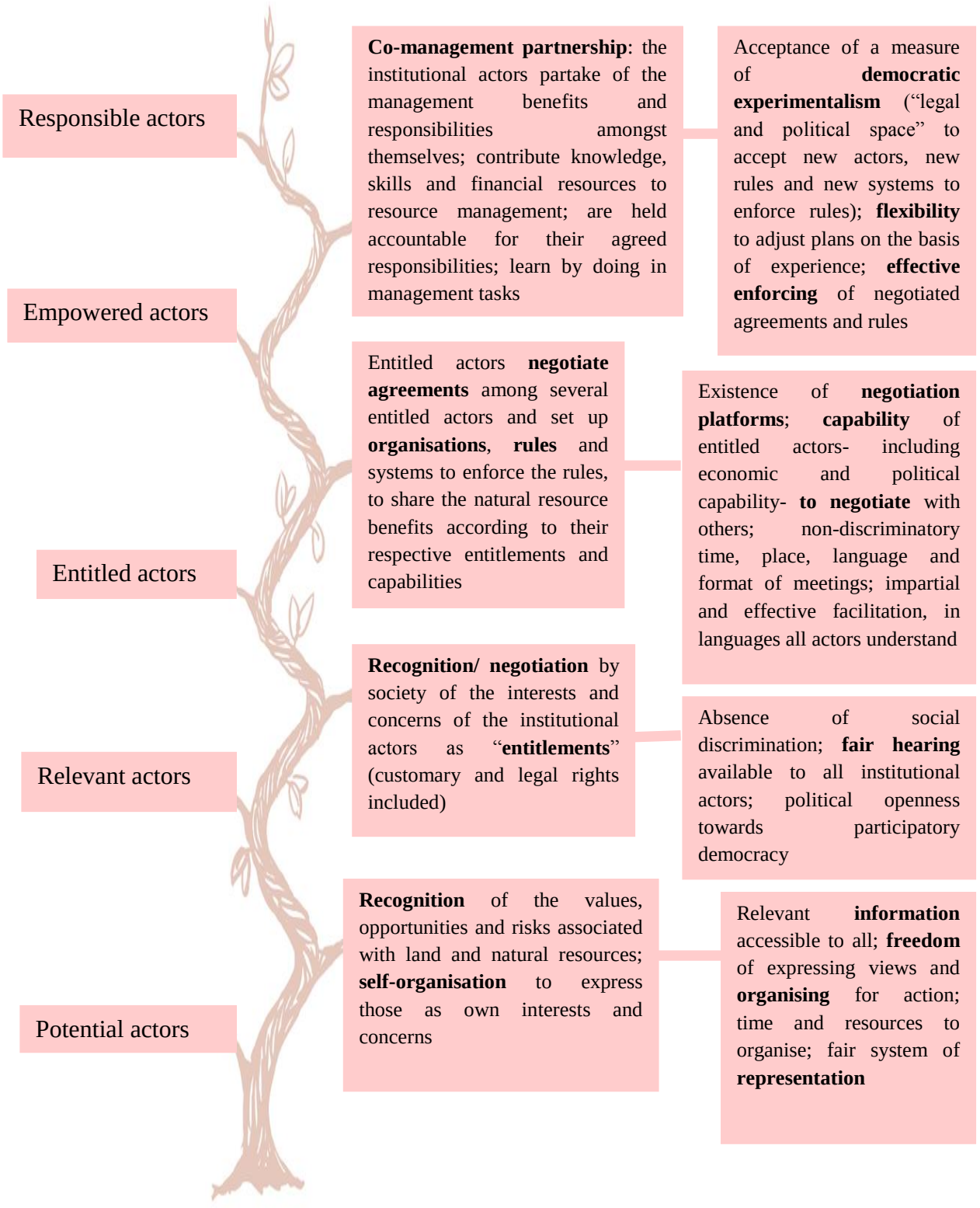

Figure 4.6: A schematic view of equity considerations in the process towards empowered and responsible social actors

(Source: Adapted from Borrini-Feyerabend et al., 2004:63)

4.3 APPLICATION OF COMPLEXITY THEORY AND SYSTEMS THINKING IN INTERPRETING THE CO-MANAGEMENT OF LAKE MALAWI NATIONAL PARK

There is no agreement that exists regarding the right application of theory and as such researchers using qualitative approaches rarely express how they apply theory in their research. However, if a researcher choses to apply theory to any study (in qualitative studies) s(he) has to look at the philosophical and theoretical bases underlying the selected approaches, identify a theoretical framework suitable for the phenomenon being studied, and embrace a creative and flexible attitude whilst being critical (Wu & Volker, 2009:2721). Following this instruction, this research has used theory in various ways including the development of philosophical underpinnings, framing of the research questions, and providing a comparative framework for analysis and interpretation of data and will further use it to incorporate a selected concept within it to support the findings. This section specifically seeks to incorporate complexity theory and systems thinking, in particular, the notion of "emergence" to make sense of management of Lake Malawi National Park.

4.3.1 Co-management as the "emergent property"

Coined by C.B. Bond, the philosopher, the term "emergent properties" was initially used to refer to the properties that emerge at a particular level of complexity but non-existent at lower levels, and was originally articulated in systems thinking in the context of systems as hierarchical and nested (Merali & Allen, 2011:41). System behaviour is an emergent property because it cannot be predicted just by a mere inspection of its components. The context which is determined by history is contained in each component and not central influences how a system behaves through interaction (Cilliers, 2000:24). In management this theory came to be applied with the realisation that organisations are complex adaptive systems capable of producing strategies in action than as planned, through the interaction that exists between the organisation and its environment. Complex adaptive systems adapt and evolve as they interact with dynamic environments (Merali & Allen, 2011:41) giving rise to emergence.

As argued by Chia (2011:193), emergence holds significant implications regarding how managerial situations are viewed, dealt with or investigated upon. In this study

this presents effective co-management as an emergent property rising out of the collaboration of stakeholders and not as planned by the DNPW. Equally important is that the study shows that LMNP as an adaptive system, is capable of self-organising until a level that is necessary for co-management has been reached. This is noted by the way other stakeholders re-organised themselves creating a force that has made authorities adapt by expanding the functions of LAMANAPA from a revenue sharing association to a problem solving and unity building association.

This study further shows that, in order to encourage collaboration each stakeholder must put their effort (Chia, 2011:193) as has been noted that the indigenous people and lodge operators were able to improve their mutual relationship. This means that as authority figures, park authority management must learn to do things practically and less bound by management rules as argued by Mencius, a Chinese philosopher, who stated that one must let a fruit grow through creating conditions that are favourable for the growth before it ripens rather than pulling it to speed up growth and maturity thereby allowing the plant to grow naturally (Jullien, 2004:90–91). From the interviews there was willingness and effort by park authority management to improve their relations with other stakeholders in the park but that it seemed not possible as they were felt bound to set management principles. This represents a condition not sufficient for improvement of collaboration yet LMNP is different from other parks in Malawi and cannot use the same rules as in other parks where communities do not benefit from park resources directly and the interaction of stakeholders is not as rich.

If therefore, park management authorities want optimal management results as it has been argued they must turn away from relying on “externally initiated” interventions and instead search for the cause for transformation from within. This in practice might include the application of policy and other strategies in such a way that they are mere guidelines and that their successful implementation depends on context (Chia, 2011:193). This is also stressed by Cilliers (2000) who argues that since such systems are adaptive in nature, they can re-organise themselves without help of external agents (Cilliers, 2000:24; Northcutt & McCoy, 2004:27–28).

In summary, complex thinking which is the way park authority management officials should consider taking if they are to improve collaboration amongst stakeholders,

requires "seeking the hidden, the inconspicuous and the peripheral" that is, re-orienting mind-sets in order to pay attention to that which is hidden, not easy to notice, and the marginalised that usually reside at the outside of the edge of attention when managing by principle (Chia, 2011:194). This is because contrary to the generally acknowledged, opportunity "is not something that needs to be grabbed but subtly discerned a long way before it becomes an actuality" requiring the manager (park authority management, in this case) to embrace complexity which comes with uncertainty and be able to work with others.

4.4 SUMMARY

This chapter provided an in-depth analysis and synthesis of community participation in the effective management of LMNP. Firstly, the community was defined by describing each of the primary stakeholders after which the relationships between each stakeholder and the park were analysed in order to provide an understanding of their various behaviours. The next step was the analysis and further synthesis of the relationships between and amongst the stakeholders. Finally, an evaluation of community participation was conducted through the analysis of collaboration amongst stakeholders. During this stage, two frameworks were used. The first provided different understandings of participation whereas the second was used to assess co-management levels. These frameworks were adopted from Mannigel (2008:499) and Borrini-Feyerabend et al., (2004:63) respectively. The findings were then supported with the aid of complexity theory and systems thinking's property of "emergence". This property signified the important of paying attention to the occurrences we usually take for granted by showing that management emerges from within the interactions of system elements making it unpredictable and hence not a planned function.

The following chapter provides a summary of the findings from this synthesis, among other things, before a general recommendations and conclusion of the study are made.

CHAPTER 5: CONCLUSIONS AND RECOMMENDATIONS

5.1 INTRODUCTION

This chapter provides a conclusion of the study. Its aim is to provide the reader with an overview of the study in terms of the major points of departure and show their application in relation to the study area. It further provides the contributions the study has made towards practice, a necessary component in the achievement of sustainable development. A self-assessment by the researcher on this research journey is also presented under this chapter before study recommendations are made.

5.2 COMMUNITY PARTICIPATION IN EFFECTIVE CO-MANAGEMENT OF PROTECTED AREAS

Literature reviewed in this study indicates that for the effective co-management of natural resources, community participation must be encouraged. Protected areas which are a sanctuary of biodiversity conservation and the maintenance of ecosystems call for sustainable use and management of natural resources as advocated for by the IUCN (Dudley, 2008:13–28; Lewis, 1996:ix). Historically, protected areas have been managed by the State with the belief that the State was better placed to manage protected areas for the benefit of all, although this was later on realised that it brought more harm to the areas than good leading to the introduction of people centred management approaches.

Three reasons have been given as to why communities must manage natural resources for conservation. Firstly, is the general belief that in Africa, the resources are located in rural areas. Secondly, that natural resources should be viewed as exploitable; and thirdly, that market forces should shape incentive structures for conservation (Hulme & Murphree, 2001:1). These reflect the "use it or lose it" principle (Suich et al., 2008:7). Community conservation refers "to the ideas, policies, practices and behaviours that seek to give those who live in rural environments greater involvement in managing natural resources that exist in the areas in which they reside, whether permanently or temporarily, and/or greater access to the benefits derived from those resources" (Hulme & Murphree, 2001:4). One of the criticisms of this approach is that

it can undermine long-term social sustainability and bring added cost to protected area authority operations making it a non-sustainable approach (Thuy et al., 2011:144). To resolve this challenge however, the involvement of stakeholders in natural resource management becomes necessary (Roberts, 2011:151). Through *good environmental governance* various stakeholders meaningfully participate thereby fostering multi-level social learning (Armitage et al., 2009:96).

Major challenges associated with environmental governance include the lack of coordination and the fragmentation that exists amongst different actors responsible for execution (Muller, 2009:73). In order to address environmental governance challenges, there is need to improve communication and understanding between resource users and government and also, the ability and openness to learn from experience which must be nurtured (Muller, 2009:73) as these factors promote democratic transformation (Rossouw & Wiseman, 2004:139). The two of the most effective and recommended ways of addressing environmental governance challenges necessary for collaborative approaches in the management of natural resources and as identified in literature include an enabling policy environment and stakeholder participation.

Policy formulation processes at the government level requires an enabling environment, taking into consideration social, economic, political, cultural as well as ecological factors (Roberts, 2011:147). Stakeholder participation can be described as a process where organisations, groups and individuals decide to take an active role in decision-making on issues that affect them (Reed, 2008:2418).

Governance has therefore become key in effective conservation of protected areas and achieving sustainable development as protected area managers are increasingly becoming aware of stakeholder involvement (Dearden et al., 2005:90; Dudley, 2008:28). In protected area management, co-management is not a new approach (Borrini-Feyerabend et al., 2004:93). Good governance of a protected area is "a governance system that responds to the principles and values freely chosen by the concerned people and country and enshrined in their Constitution, natural resource law, protected area legislation and policies and or cultural practices and customary law" (Dudley, 2008:28).

Achieving collaboration is necessary for a functional policy strategy. Theoretically, coordination stems from three governing structures of hierarchy, market and networks. Although all these ways can improve collaboration, literature indicates that there is no best way of dealing with protected area governance as it depends on context (Dearden et al., 2005:98–99).

Although there is adequate literature on stakeholder participation as witnessed by the literature discussed in this study, less has been written on the creation of stakeholder participation. A notable author in the field, (Hemmati, 2002) argues that the formation of Multi Stakeholder Processes (MSPs) is a critical element in providing direction towards sustainability and governance (Hemmati, 2002:3). Although there is no single best way of constructing a governance model, all contextual factors that are relevant must be taken into consideration (Muller, 2009:74).

5.3 SUMMARY OF RESEARCH RESULTS

The study sought to identify the level of collaboration amongst stakeholders in LMNP and evaluate if it is adequate to enhance community participation for the effective management (co-management) of the park. This study therefore supports the literature reviewed which indicates that effective participation on its own, though necessary is not sufficient, as it requires an acceptable level of collaboration dictated by the context (Muller, 2009:69). This was achieved through answering four research questions. Firstly, the study sought to identify the stakeholders that make up the LMNP Community. It found that the primary stakeholders were the park authority management, lodge operators and villagers. This was in line with the principal stakeholders identified in the management plans of LMNP. Of the three, park authority management was a State actor, whereas lodge operators and indigenous people were non-State actors.

Secondly, the study sought to establish the importance of the park to each of these stakeholders in terms of direct benefits. This was done in order to provide an understanding of the meaning and value that these stakeholders attach to the area as it determines stakeholder behaviour (Borrini-Feyerabend et al., 2004:47). The results

confirmed the position of literature as stakeholders were found to have a special relationship with the park. In particular, the park provided business opportunities, a source of livelihood and a sense of empowerment to the indigenous people, whilst for lodge operators, the benefits included business opportunity and relaxation space. Although the park authority management were not asked, it was obvious that as individuals, they benefitted through employment. In addition to the direct benefits, non-State stakeholders confirmed this special relationship with the park by indicating that they were permanent residents and had no intentions to move out.

Thirdly, the study went further to establish the relationship each stakeholder had with the others. The purpose of this question was for the researcher to identify some of the underlying factors that affect participation as stakeholder networks drive collaborative efforts (Muller, 2009:84). In addition, answering this question would indicate the level of stakeholder satisfaction in terms of their relationships which would further signal their willingness to work together in order to achieve effective management of the park. The results indicated that stakeholders were not satisfied with the level of relations in the park especially towards park authority management. This is a deviation from the expected in that for a long time relations in the park were seen to be faulted by the indigenous people and especially towards lodge operators, yet in this study, relations between these two stakeholder groups were found satisfactory.

From a complexity theory and systems thinking angle, this deviation can be explained in that socio-ecological systems like all dynamic systems have the ability to self-organise when not interfered with by external agents (Cilliers, 2000:24; Northcutt & McCoy, 2004:27–28). The understanding being that with the State actor, it is always under pressure and subjected to various instructions from the external environment of the national park which limit its ability to self-organise in relation to the others. However, with the self-organisation notion from a systems perspective, we can assume that park authority management will soon adjust to the same level as the other stakeholders for a functional relationship since they are part of the system. This was already evident in the formation of an umbrella body called Lake Malawi National Park Association (LAMANAPA) where representation will hopefully be satisfactory for all.

The fourth question which was aided by the answering of the first three questions was to identify if these stakeholder relations were adequate for the desired level of collaboration necessary for enhancing community participation within the park. The study found that whilst there were reduced levels of conflict and that stakeholders communicate as and when need arises, the general level of collaboration was below the community's expectation. On a positive note, it showed the willingness of the stakeholders to form a representative body which they all felt would be better placed to negotiate decision-making and would improve the level of collaboration and management in the park.

This is explained in the fact that although other stakeholders respect the role of park authority management, they indicated with discontentment that the latter have an upper say on issues as the sole decision-makers. They therefore expressed the need, in various ways, to participate in the processes of the decision-making rather than being on the receiving end.

Contrary to this view, the authorities felt that their relationship with the villagers although troubled, was much better with the formation of the village trust and that their relationship with lodge operators was not turbulent. This finding indicated the gap in communication amongst the three stakeholders and that both park authority management and the village trust, are not effective in executing their duties.

5.4 CONTRIBUTIONS OF STUDY TO PRACTICE

This study is the first of its kind in this park regarding community participation in the management of the park. Like all first time studies, it had a number of contributions, the most significant of which has been the realisation that the main cause of unsatisfactory stakeholder relations is the park authority management and not the villagers as has always been the perception. This result does explain as to why implementation of co-management practices fail to reach satisfactory levels in the park as the focus is on the wrong stakeholder group. This study result will therefore provide a direction to the DNPW to refocus their efforts towards community participation. The study assumes that when this is done, the park will be able to achieve its management objectives.

Secondly, it contributes to the tourism needs of the area if the Department of Tourism is able to adjust its priorities within the area to the needs of the stakeholders as all stakeholders indicated tour guide training as a need that required attention in the long-term.

Thirdly, through conducting the study, relationships were renewed between the various stakeholders and to appreciate the social capital in the area. This is a breakthrough in this study as it not only contributes to science but also to practice, a gap that needs to be filled if we are to achieve sustainable development.

Last but not least, this study although specific to LMNP has opened up a wider perception of how sustainability research is conducted and practitioners and researchers alike will be able to take into account the context through a complexity angle and to face the real world with neutrality, flexibility and openness.

5.5 RESEARCHER'S SELF-ASSESSMENT

It is important to acknowledge that whilst the study has been successful, like any other study, it faced challenges which further studies must follow up on. Firstly, it failed to identify deeply the relationships between the sub-groups within each stakeholder category as it was out of scope. Further studies should focus on these specific relationships. Secondly, the study area is still virgin in terms of research that relates to the human component yet rich in biological research. Many areas can be explored and worked on as this has the capacity to improve conservation whilst at the time promoting sustainable use through good relationships. When this is done, sustainable development will be achieved as the needs of the current generation will be met without necessarily compromising those of the future generation, otherwise if concentration is on biological research then focus will be on the future generation whose results will be jeopardised because the current generational needs are not met.

Technically, the use of open ended interview schedules presented difficulties to the researcher during analysis as practically data was to be coded depending on the responses yet guided by research questions and not on researcher preferences. This, in

reality, means that the study has not captured all that was said by the respondents but rather a generic overview, one deemed primary for this study.

5.6 RECOMMENDATIONS

Five recommendations have been made following the study on how participation and stakeholder skills can be improved.

5.6.1 Speedy facilitation of the creation of an umbrella association, LAMANAPA, as has been argued that a significant approach in protected area management is through the creation of "protected area councils" or "negotiated agreements with stakeholders" (Mannigel, 2008:501). This will ensure that there is fair representation of all stakeholders at management level. Such a creation is enabled by a common understanding and purpose. The LMNP community is aware of their common purpose determined by their relationship with the park, and since authorities are part of the community, then it means the other stakeholders have direct access to them (Hemmati, 2002:10). Besides improving communication amongst State and non-State stakeholders, such a process encourages openness to learn from experience (Muller, 2009:73), referred to as social learning by Mannigel (2008:509); bringing forth desired democratic transformation (Rossouw & Wiseman, 2004:139).

Deliberate effort must be employed to ensure that stakeholders make the necessary name changes; and regular progress checks on the Registrar General must be the responsibility of the park authority management. Further, that stakeholders should check whether the current entity's institution and mandate need to be amended to provide for its new proposed role and membership so that it is used as the proposed collaborative mechanism.

5.6.2 Recognition of tour guides. The Department of Tourism must respond to the training needs of tour guides from the village. This should be done in liaison with the tour guides themselves to ensure the plan is sustainable. Tour guides realise the importance of official recognition and are willing to work with the said Department in upgrading their skills but lack the capacity to do so.

5.6.3 The study, indicates that meetings amongst park stakeholders are utmost consultative and not participatory. An appropriate mix of context specific participation strategies to ensure as much as possible participation could resolve the situation.

5.6.4 The park should establish a Grievance Mechanism which will allow stakeholders to register complaints should they not get any joy out of the new collaborative structure.

5.6.5 Park management should undergo stakeholder negotiations / conflict management training as park managers are often conservationists with limited experience in dealing with external stakeholders. The IUCN BIOPAMA Programme which is currently running such training workshops with great success will aid capacity development.

These five major issues if critically looked at, will create an environment in which stakeholders are able to collaborate and work as a community in the development and management of the protected area which is good for conservation and sustainability of livelihoods thereby not only achieving the park's management objective of "improving collaboration and coordination with stakeholders" (Department of National Parks and Wildlife, 2012:8).

5.7 SUMMARY

The researcher believes that these recommendations have a ripple effect on other management objectives and facilitate their achievement which include raising awareness on the Outstanding Universal Value on the World Heritage Site, providing support to community initiated projects, reduction of human/wildlife conflicts, reducing the prevalence of HIV/AIDS, reducing wildfire incidences, and exploring financing mechanisms (Department of National Parks and Wildlife, 2012:8) as in unity, a system is thrives.

It has been argued that broad community participation, advocacy groups, scientists and professionals in park management have worked together in shaping a

conservation system that is strong but which is also valued by visitors and local people alike as it meets their needs although not formally linked to collaborative management structures (Schelhas, 2001:302–303). This therefore means that if effort is invested in building collaborative structures then protected areas will be better placed in achieving effective management, one that is characterised by good governance.

The literature reviewed in this study indicates that a common purpose and collaborative relationships are prerequisites for co-management (Schusler et al., 2003:312) and that achieving collaboration is necessary in order to have a functional policy strategy, because collaboration through networks is likely to solve coordination problems (Muller, 2009:84).

In conclusion, the researcher would like to borrow from the works of Chia (2011:193) from his article *Complex Thinking: Towards an Oblique Strategy for Dealing with the Complex* in stating that "it appears that there is more wisdom in approaching managerial situations more modestly and elliptically allowing priorities to emerge spontaneously through local ingenuity and adaptive actions taken *in situ* in directly addressing and confronting the deficiencies identified. Such an unspectacular approach often proves more sustainable than dramatic interventions…there is much evidence to suggest that in the history of social progress and evolution, favourable outcomes are often not the deliberate design and machinations of any one individual or institution but the collective unintended outcome of a multitude of individuals each merely seeking to respond constructively to the predicaments they find themselves in".

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Appendices

Appendix A: Ethics Approval Notice

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jou kennisvennoot • your knowledge partner

Approval Notice
New Application

17-Jun-2014
Kaleke, Tamanda T

Proposal #: DESC/Kaleke/May2014/29

Title: **An analysis of community participation in the management of resources in protected areas: A study of Lake Malawi,Lake Malawi National Park.**

Dear Ms Tamanda Kaleke,

Your New Application received on 08-May-2014, was reviewed
Please note the following information about your approved research proposal:

Proposal Approval Period: 12-Jun-2014 -11-Jun-2015

Please take note of the general Investigator Responsibilities attached to this letter. You may commence with your research after complying fully with these guidelines.

Please remember to use your proposal number (DESC/Kaleke/May2014/29) on any documents or correspondence with the REC concerning your research proposal.

Please note that the REC has the prerogative and authority to ask further questions, seek additional information, require further modifications, or monitor the conduct of your research and the consent process.

Also note that a progress report should be submitted to the Committee before the approval period has expired if a continuation is required. The Committee will then consider the continuation of the project for a further year (if necessary).

This committee abides by the ethical norms and principles for research, established by the Declaration of Helsinki and the Guidelines for Ethical Research: Principles Structures and Processes 2004 (Department of Health). Annually a number of projects may be selected randomly for an external audit.

National Health Research Ethics Committee (NHREC) registration number REC-050411-032.

We wish you the best as you conduct your research.

If you have any questions or need further help, please contact the REC office at 0218089183.

Sincerely,

Clarissa GRAHAM
REC Coordinator
Research Ethics Committee: Human Research (Humanities)

Investigator Responsibilities

Protection of Human Research Participants

Some of the general responsibilities investigators have when conducting research involving human participants are listed below:

1. Conducting the Research. You are responsible for making sure that the research is conducted according to the REC approved research protocol. You are also responsible for the actions of all your co-investigators and research staff involved with this research. You must also ensure that the research is conducted within the standards of your field of research.

2. Participant Enrollment. You may not recruit or enroll participants prior to the REC approval date or after the expiration date of REC approval. All recruitment materials for any form of media must be approved by the REC prior to their use. If you need to recruit more participants than was noted in your REC approval letter, you must submit an amendment requesting an increase in the number of participants.

3. Informed Consent. You are responsible for obtaining and documenting effective informed consent using **only** the REC-approved consent documents, and for ensuring that no human participants are involved in research prior to obtaining their informed consent. Please give all participants copies of the signed informed consent documents. Keep the originals in your secured research files for at least five (5) years.

4. Continuing Review. The REC must review and approve all REC-approved research proposals at intervals appropriate to the degree of risk but not less than once per year. There is **no grace period.** Prior to the date on which the REC approval of the research expires, **it is your responsibility to submit the continuing review report in a timely fashion to ensure a lapse in REC approval does not occur.** If REC approval of your research lapses, you must stop new participant enrollment, and contact the REC office immediately.

5. Amendments and Changes. If you wish to amend or change any aspect of your research (such as research design, interventions or procedures, number of participants, participant population, informed consent document, instruments, surveys or recruiting material), you must submit the amendment to the REC for review using the current Amendment Form. You **may not initiate** any amendments or changes to your research without first obtaining written REC review and approval. The **only**

exception is when it is necessary to eliminate apparent immediate hazards to participants and the REC should be immediately informed of this necessity.

6. Adverse or Unanticipated Events. Any serious adverse events, participant complaints, and all unanticipated problems that involve risks to participants or others, as well as any research related injuries, occurring at this institution or at other performance sites must be reported to Malene Fouch within **five (5) days** of discovery of the incident. You must also report any instances of serious or continuing problems, or non-compliance with the RECs requirements for protecting human research participants. The only exception to this policy is that the death of a research participant must be reported in accordance with the Stellenbosch University Research Ethics Committee Standard Operating Procedures. All reportable events should be submitted to the REC using the Serious Adverse Event Report Form.

7. Research Record Keeping. You must keep the following research related records, at a minimum, in a secure location for a minimum of five years: the

REC approved research proposal and all amendments; all informed consent documents; recruiting materials; continuing review reports; adverse or unanticipated events; and all correspondence from the REC

8. Provision of Counselling or emergency support. When a dedicated counsellor or psychologist provides support to a participant without prior REC review and approval, to the extent permitted by law, such activities will not be recognised as research nor the data used in support of research. Such cases should be indicated in the progress report or final report.

9. Final reports. When you have completed (no further participant enrollment, interactions, interventions or data analysis) or stopped work on your research, you must submit a Final Report to the REC.

10. On-Site Evaluations, Inspections, or Audits. If you are notified that your research will be reviewed or audited by the sponsor or any other external agency or any internal group, you must inform the REC immediately of the impending audit/evaluation.

Appendix B: Consent Form

UNIVERSITEIT•STELLENBOSCH•UNIVERSITY
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STELLENBOSCH UNIVERSITY
CONSENT TO PARTICIPATE IN RESEARCH

RESEARCH TITLE*: EVALUATING COMMUNITY PARTICIPATION IN THE MANAGEMENT OF PROTECTED AREAS. A CASE STUDY OF LAKE MALAWI NATIONAL PARK*

You are asked to participate in a research study conducted by Tamanda Kaleke, Master of Philosophy Student, from the Department of Sustainable Development in the School of Public Leadership at Stellenbosch University. The results of this research will contribute to my thesis. You were selected as a possible participant in this study because you are belong to a user group that uses the lake as a resource, and are a representative of this group.

PURPOSE OF THE STUDY

The aim of the research is to explore the possibility of using user-group (Lake use) conflicts and disputes as a practical way for enhancing community participation in effective management of the park.

PROCEDURES

If you volunteer to participate in this study, we would ask you to do the following things:

Cooperate in providing me with a thick description of your life story in this Park, the importance of the lake to you and to your user group, your relations with other user groups, the power distribution in this park as per the attached interview schedule 2.

This will approximately take a few hours of your time and depending on circumstance, I might come back to you for further details. This research will be done in the comfort of your space.

POTENTIAL RISKS AND DISCOMFORTS

This is a low risk research and has no intentions of harming you in any way. However, if you at any point during this interview feel discomfort due to a question, you shall be asked to state the reason why you are uncomfortable as this will contribute to the findings of the research. You are therefore asked to alert me immediately and together we shall identify with an appropriate way to ask the question.

POTENTIAL BENEFITS TO SUBJECTS AND/OR TO SOCIETY

This research will benefit you as it will guide effective community participation in Park management. This will ensure that you have equal opportunities with all other resource user groups towards the achievement of park goals which is ensuring benefit of the resources to all.

PAYMENT FOR PARTICIPATION

No participant will receive payment as this research is working towards the betterment of local and national development.

CONFIDENTIALITY

Any information that is obtained in connection with this study and that can be identified with you will remain confidential and will be disclosed only with your permission or as required by law. The gathered information, shall only be produced to the Department of National Parks should they need it as park is under their jurisdiction. The interviews will be recorded on tape and kept under the custody of the National Archives Department for your confidentiality. In the event that the results are published, your confidentiality will be maintained by keeping you anonymous if you wish.

PARTICIPATION AND WITHDRAWAL

You can choose whether to be in this study or not. If you volunteer to be in this study, you may withdraw at any time without consequences of any kind. You may also refuse to answer any questions you don't want to answer and still remain in the study. The investigator may withdraw you from this research if circumstances arise which warrant doing so.

IDENTIFICATION OF INVESTIGATORS

If you have any questions or concerns about the research, please feel free to contact me, Tamanda Kaleke on +265 999 722 152, Ministry of Tourism and Culture, postal address P/Bag 326, Lilongwe 3. Email address tskaleke@yahoo.com.

RIGHTS OF RESEARCH SUBJECTS

You may withdraw your consent at any time and discontinue participation without penalty. You are not waiving any legal claims, rights or remedies because of your participation in this research study. If you have questions regarding your rights as a research subject, contact Ms Maléne Fouché [mfouche@sun.ac.za; 021 808 4622] at the Division for Research Development.

SIGNATURE OF RESEARCH SUBJECT OR LEGAL REPRESENTATIVE

The information above was described to [*me/the subject/the participant]* by [*name of relevant person]* in English/Chichewa and [*I am/the subject is/the participant is]* in command of this language or it was satisfactorily translated to [*me/him/her*]. [*I/the participant/the subject]* was given the opportunity to ask questions and these questions were answered to *[my/his/her]* satisfaction.

[I hereby consent voluntarily to participate in this study/I hereby consent that the subject/participant may participate in this study.] I have been given a copy of this form.

_____

Name of Subject/Participant

_____

Name of Legal Representative (if applicable)

_____ _____

Signature of Subject/Participant or Legal Representative **Date**

SIGNATURE OF INVESTIGATOR

I declare that I explained the information given in this document to _____ [*name of the subject/participant]* and/or [his/her] representative _____ [*name of the representative]*. *[H*e/she] was encouraged and given ample time to ask me any questions. This conversation was conducted in (English/Chichewa) and no translator was used.

_____ _____

Signature of Investigator **Date**

Appendix C: Interview Schedules

INTERVIEW SCHEDULE A.

LAKE MALAWI NATIONAL PARK (LMNP) AUTHORITY MANAGEMENT

1. Please introduce yourself (name, years of service and experience since joining Dept of National Parks, years of service and experience here at LMNP)
   - *Ndikudziweni (Dzina, Udindo, Zaka zomwe mwagwira ntchito ku Department ya National parks, Nthawi yomwe mwagwira ntchito ku LMNP)*

2. Please give me a detailed brief of LMNP.
   - *Mwachidule mungandiuzeko mbiri ya LMNP(inakhazikitsidwa liti, Pazifukwa zingati)*

3. In your opinion based on your experience, does the park fulfill its intended purpose?
   - *Kodikufikira lero LMNP yakwaniritsa cholinga chake chimene inakhazikitsidwira?*

4. What are some of the major challenges that as authorities you face in day to day management of the Park?
   - *Ndimavuto anji amene mumakumana nawo inu ngati adindo pogwira ntchito yanu mu park imeneyi?*

5. Who are the primary stakeholders/ resource users in this Park as regards the lake?
   - *Kodi mu park imeneyi muli magulu angati a anthu kutengera mmene amagwiritsira ntchito Nyanja imene muli nsomba zotetezedwayi?*

6. How would you define relationships in the park (with operators-local and foreign; villagers-tour guides, fishermen, and others)
   - *Mungandifotokozereko zamaubale amene alipo kapena kuti mmene maubale amayendera mu park imeneyi?*

LMNP management Documents backed by the laws of Malawi recognise and give room for the involvement of stakeholders in the management of natural resources as well as protected areas as one way of dealing with environmental challenges in realisation that in Malawi apart from these challenges being complex, they are also caused by poverty and exclusion from use.

Ndondomeko yoyendetsera LMNP motsimikizidwa ndimalamulo a dziko lino la Malawi imazindikira ndikupereka mpata kwa magulu osiyanasiyana kuphatikizapo mabungwe omwe siaboma, makamaka anthu okhudzidwa kwambiri amene amakhala moyandikirana ndimalo otetezedwawa pozindikira kuti mavuto omwe amadza chifukwa choononga chilengedwe kunoku Malawi amayamba ndiumphawi komanso kusalidwa kwamagulu okhudzidwa wa mu kagwiritsidwe ntchito ka malowa.

7. Do you agree?
   - *Mukuvomerezananazo?*

8. To what extent is this true?
   - *Pazifukwa ziti zimene mukugwirizana nazo?*

9. What programs have been put in place to ensure stakeholder involvement and participation in this park?
   - *Ndindondomeko zanji zimene zakhazikitsidwa kufikira lero zoonetsetsa kuti magulu a anthu amenewa akutengapo mbali pa kayendetsedwe kamalowa?*

10. LMNP management Plan makes reference to the Nankumba Peninsula strategic Plan of 1999 as being important to achieving stakeholder involvement. Is this an effective document in achieving this objective?
    - *Ndondomeko yanu yoyendetsera park imeneyi ya LMNP Management Plan imatchula Namkumba Peninsula Strategic Plan ya 1999 kuti ndiyofunika pokwaniritsa kuti magulu amenewa athe kutengapo mbali pa kayendetsedwe ka park imeneyi. Mukuona kwanu izi ndizoona?*

11. Are stakeholders willing and interested to be involved in Park Management?

- *Mukuona kwanu anthu ndi achidwi pa mayendetsedwe a malo otetezedwa wa?*

12. What sort of outreach programmes have been put in place if any?
    - *Ndi ndondomeko zanji zimene zinakhazikitsidwa kuti anthu adziwe za ma ufulu ndi maudindo awo pakayendetsedwe amalo otetezedwa?*

13. LMNP Management Plan also recognises zoning as a critical element in resolving some challenges within the Park. To what extent has this taken place? Is this effective?
    - *Ndondomeko yoyendetsera LMNP imatchula zoning /kapatulidwe ka malo kutengera ndi ntchito zosiyanasiyana zimene zimachitika pa malopo) ngati njira imodzi yofunika pothana ndimavuto amene amadza tsiku ndi tsiku pogwiritsa ntchito za chilengedwe zamu park mu. Kodi zimenezi zinachitika ndipo zimatsatiridwa?*

14. What are some of the major land /resource uses in the park?
    - *Kodi ndi ntchito zazikulu ziti zimene zimachitika ndipo zimatsatiridwa mu park kumbali yokhudza malo kapena zachilengedwe zimenezi kupezeka mu park/ ndizachilengedwe zanji zimene zi mapezeka mu park ndipo zimagwiritsidwa munjira yanji?*

15. Fishing within the perimeters of the park is prohibited yet Chembe and other villages surrounding the park are fishing villages? How do you deal with such challenges?
    - *Kuwedza nsomba mu LMNP nkoletsedwa ngakhale kuti midzi imene iliyozungulilidwa ndi park yi imadalira usodzi pamoyo watsiku ndi tsiku? Kodi vuto limeneli mumathana nalo bwanji?*

LMNP Management Plan mentions revenue sharing as another way of putting park resources to sustainable use.

LMNP Management plan imakamba zakugawana makobiri amene amatoleredwa mu park ngati njira imodzi yoonetsetsa kuti anthu onse akupindula ndi malowa.

16. How is the revenue collected considering that doesn't have a gate like in most parks?
    - *Kodi ndalama zimenezi zimapezedwa bwanji popeza LMNP ilibe chipata cholowera?*
17. What is the percentage share of each subgroup?
    - *Kodi gulu lililonse limapezapo cholowa chanji/ magawanidwe amayendabwanji*)
18. How is the money put to use?
    - *Ndalama zimenezi zimagwira ntchito yanji*

Conflict is inevitable where two or more groups of different interests exist together.

- *Kusagwirizana pakati pa anthu amene amakhalira limodzi koma mwina pazifukwa zosiyana ndikosathawika.*

19. So far what have been the notable conflicts in the park?
    - *Kufikira lero ndikusayanjana kotani kumene kwachitika inu chiyambireni ntchito kuno?*
20. How do you deal with such conflicts?
    - *Mumathana nayo bwanji mikangano imeneyi?*
21. Are you aware of any committees within the park?
    - *Kodi mukudziwa ngati magulu amu park imeneyi ali ndi mabungwe?*
22. Does the park have a multi-stakeholder committee? What is the composition of this committee? How often do they meet?
    - *Kodi Park yi ili ndi bungwe lama gulu a anthu amene amapezamo phindu? Muli ndani? Nanga amakumana kangati pachaka?*

The role of local /traditional knowledge is key in resolving environmental challenges. Udindo wa nzeru zamakolo/ chikhalidwe ndizofunika pakayendetsedwe pantchito iliyonse yokhudza zachilengedwe.

23. How does LMNP incorporate local knowledge in its daily plans?
    - *LMNP imaonetsetsa bwanji kuti nzeru zimenezi zikugwiritsidwa ntchito mukayendetsedwe ka Park.*
24. How are chiefs involved in management of the park? What is their role?
    - *Ntchito yamafumu ndi chani mukayendetsedwe ka Park?*
25. How effective are chiefs in their role?
    - *Mafumu amathandiza munjira yanji pakayendetsedwe a Park?*

Decentralization through local government structures is also an important element in ensuring participation is devolved to the lowest possible level.

Kupereka mphamvu kwa anthu podzera mu kakhazikitsidwe ka maboma ang'ono ang'ono ndikofunika pachitukuko chilichonse.

26. How effective are local government structures in the management of protected areas?
    - *Maboma ang'ono ang'ono amathandiza bwanji mu ntchito yoyendetsa malo otetezedwa?*
27. Moving forward, what would you like to see changed in the way the park is managed?
    - *Kupita Chitsogolo, mungakonde chain chitasintha pakayendetsedwe ka park imeneyi?*
28. What have you done so far?
    - *Mwatenga mbali yanji poonetsetsa kuti zinthu zisinthe mukayendetsedwe ka Park?*

THANK YOU VERY MUCH FOR YOUR TIME AND ATTENTION!

ZIKOMO KWAMBIRI KAMBA KA NTHAWI YANU!

INTERVIEW SCHEDULE B.

OTHER STAKEHOLDERS

1. Please give a detailed background of yourself?(name, family history/place of origin, why you are here)
   -chonde ndiloleni ndikudziweni? (dzina, kumene mukuchokera, chifukwa chimene mukupezeka kuno)
2. Describe your relationship with the park (how long have you been in the park? How important is the park to you)

- *Mungathe kundifotokozerako za ubale wanu ndi Park imeneyi? (mwakhala nthawi yaitali bwanji muno mu park? Ndichifukwa chain park ino ili yofunika kwa inu?*

3. Please mention other users of the park that you are aware of especially the lake.

- *Chonde tchulani magulu ena a anthu amene amagwiritsa ntchito park imeneyi makamaka nyanjayi?*

4. How would you describe your relationships with other users (stakeholders) in this park?

- *Kodi mphamvu komanso ma ubale a anthu mu park imeneyi ndi otani?*

5. Describe park management, and in your view say whether it is effective or not

- *Fotokozani mmene a park amayendetsera malowa. Kumbali yanu kodi zimenezi ndizoyenera kapena ayi mukatetezedwe kachilengedwe.*

6. How long do you intend to stay in this park?

- *Kodi mukhala mu park ino nthawi yaitali bwanji?*

7. Do park authorities interfere with your daily work or life?

- *Kodi aboma amasokoneza moyo wanu watsiku ndi tsiku mukayendetsedwe ka park imeneyi?*

8. Why do you think this is so?
- *Mukuona kwanu mukuona ngati izi zili choncho chifukwa chani?*

9. Are you aware of park entry fees? How often do you remit park fees (if you collect)?
- *Kodi mukudziwapo za ndondomeko yotolerera misonkho yaboma mu dera lino? Ngati mumatolera misonkho ya boma mumapeleka kangati ku boma?*

10. What would you like to see changed in this park?
- *Ndi chani mungakonde chitasintha mu park imeneyi?*

11. In your opinion suggest a way in which this change can come along
- *Mumaganizo mwanu izi zingasinthe bwanji?*

12. What have you done within your capacity in ensuring that this change can come along?
- *Ndichani chimene mwachita pakutengapo mbali kuti kusintha kumeneku kuchitike?*

THANK YOU VERY MUCH FOR YOUR TIME!
ZIKOMO KWAMBIRI CHIFUKWA CHA NTHAWI YANU!